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Drema Hymon

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Walden University 2019

Abstract

Use of Force Citizen Complaints, Use of Force Violations, and Early Intervention

by

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MA, Colorado Technical University, 2014

BSW, West Virginia University, 1977

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Criminal Justice

Walden University

November 2019

Abstract

Mounting public protests, increasing expensive payouts, and shootings of unarmed victims by police is a call to reexamine options to problem solving, service recovery, and preventing police misconduct as it pertains to the use of force. The purpose of this quantitative study was to examine the correlation between early intervention system data (a) use of force, citizens' complaints (race and gender), and use of force violations (race, gender, and years of service for officers). The disruptive theoretical framework provided an innovative lens to examine police misconduct of a large midwestern large law enforcement agency. This secondary data study did not find significant relationships between stated variables using chi-square analyses. Although consistent with other studies, males were found likely victims of excessive use of force ($X^2 = 114.093$, p =.000) using multiple regression. By expanding the characteristics of basic variables based on a (use of force) continuum model, the data can be treated as a disruptor with potential to reach maintenance or high productivity and sustainability. The fields of healthcare and education have made strides using this model, and this model may also add to the existing knowledge to create greater transparency, service recovery, and policy modification needed to reduce the use of force police misconduct. As society changes with varying political mandates, public opinions and technological communications, it is apparent that law enforcement must also continually improve efforts to enhance accountability and transparency relating to the use of force.

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Dedication

This dissertation is dedicated to the memory of my parents, John A. Hymon, Jr. and Willie Ann Hymon, and my beloved sister and friend, Colleen Patricia and brother, James Matthews. Motivation and determination inspired by family: Matthew, Miranda, Tyler, Julian, and Grayson. An extraordinary devotion held for fellow Christians. Above all, much gratitude is given to God for His guidance, provision, peace, and love.

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Chapter 1

Introduction

This study investigated the relationship between the use of force (UOF) citizen complaints, UOF violations, and the Early Intervention System (EIS) at a large midwestern law enforcement agency in the United States using (EIS) data from 2013 through 2017. The EIS is a technological data-driven system recommended by the U. S. Commission on Civil Rights for use by law enforcement agencies to curtail police officer misconduct and to improve agency accountability (Alpert, & Kenney, 2001, Bazley, Mieczkowski, & Lersch, 2009; Walker). More than one-fourth of all law enforcement agencies use this system to address performance and accountability issues based on individual officers' misconduct. Moreover, the use of EIS continues to increase as well as impact police misconduct (Walker, Alpert, & Kenney, 200).

The EIS is a repository of information related to police officer performance. Hence, EIS data generates outcomes that are used to reduce misconduct, minimize associated cost, and duplicate best practices in law enforcement. The Commission Accreditation for Law Enforcement Agency (CALEA, 2019) was adopted initially to make law enforcement more effective and implement an accreditation program including guidelines aimed at reducing police misconduct. However, misconduct is costly and can cause civil liability cases resulting from inappropriate aggressive policing (Novak, Smith, & Frank, 2013), as well as impact other issues including police accountability and reform (Walker, 2012), risk management (Worden, Harris, & McLean, 2013), racial disparities (Smith & Holmes, 2014), and intervention procedures. The EIS lacks empirical research concerning citizen complaints. A greater insight of these complaints could prevent future cases of excessive police misconduct. The integration of citizen complaints data with other agency datasets promotes early warning systems' utility to enhance strategic intelligence policing (Macintyre, Prenzler, & Chapman, 2008). Jackson, Towe, Wagner, Hunt, Greathouse, & Hollywood (2017) recommended conducting objective and statistical analysis of requirements for training development, implementation of appropriate interventions, and policy modifications as it pertains to expanding knowledge of police misconduct. Therefore, this study fills the gap and recommends further investigation of police misconduct by examining the effectiveness of the EIS.

This correlational study was an innovative approach to establishing baseline indicators that add knowledge and fill in the gap in existing research. Moreover, these findings demonstrate the need for further investigation using EIS data by obtaining a greater understanding of reported violators. Implications of positive social change from this analysis include reducing police officer misconduct, reducing citizen-complaint settlements, enhancing community policing, and preventing citizen deaths. The problem statement section describes the problem as well as identify a significant gap in the literature. The purpose section, describes the intent and variables of this correlational study. The research question and hypotheses section include the research questions, hypotheses, and variables. The theoretical framework section includes the development and use of the theory for this study. The nature of the study section provides an explanation of the methodology and selected variables. The definition section provides meanings for the variables and keywords that are specific to this study. In the assumptions section, concepts are presented that are believed, but not proven. In the scope and delimitations sections, the research problem is redefined and described pertaining to its relevancy to this issue. The limitations section provides an overview of the methodology's weaknesses and potential for bias. In the significance section, the potential positive social change is presented as well as contributions to law enforcement agencies' use of the EIS. The final section provides a summary and transition to Chapter 2.

Background

This correlational study was descriptive, and is an examination of the relationship between UOF citizen complaints, UOF violations, and the EIS. The National Institute of Justice presents a review of existing literature that explores reliable evidence associated with effective police accountability. However, more research is needed to develop evidence-based policymaking using EIS data (Walker & Archbold, 2013). The UOF citizen complaints and the EIS remain at the focus of the on-going developments in police accountability.

Multiple researchers have addressed the occurrence of UOF. Macintyre et al. (2008) addressed early intervention in reducing complaints while Bazley et al. (2009) found issues with identifying problematic and nonproblematic officers accurately. These researchers have contributed vital information to the study of UOF. With further probing of EIS data, preventive measures can be established. For example, Walker, Milligan, and Berke (2005) developed a tool to help law enforcement agencies understand how police

and citizen encounters escalate into excessive use of force situations. More agencies could accomplish similar preventive measures by using EIS data and by focusing on data integrity, clarity, and consistency regarding UOF issues.

The former Director of the Federal Bureau of Investigation, James Comey, maintained that existing data on officer-involved shootings is unreliable to address the accuracy or validity of the UOF violation findings (Washington Post, 2015). Also, as stated by Blanks (2015), data collection related to complaints and violations have been challenging to obtain due to policy, privacy, and legal restrictions. There is a need to promote further research on this topic and improve data collection practices and information sharing by law enforcement agencies.

Law enforcement agencies, municipal officials, and the public possess a mutually vested interest in further research regarding the manipulation of EIS data. Advanced research to support standardizing terminology, policy, and procedures is necessary to expand the use of the EIS. As a result of increased research, stakeholders may modify and enhance training, interventions, and policies. e exploration of gender, race, and officers' tenure promotes a greater understanding of the impact of police misconduct on all stakeholders. UOF violations entail civil liability and police aggression (Novak, Smith, & Frank, 2003) as well as other issues including accountability reform (Walker, 2012), police deviance (Punch, 2010), and racial disparities (Smith & Holmes, 2014). These variables and related concerns present more detailed information within the problem statement section and in other sections of this dissertation.

Problem Statement

Police misconduct and accountability issues highlight the continual need for understanding and improving the effectiveness of oversight models and practices. The examination of the UOF citizen complaints and UOF violations at the selected law enforcement agency will show a relationship to increase, decrease, or have no effect upon police misconduct in comparing the years 2013 up until 2017.

The axiom accepted by police chiefs is that 10% of police officers cause 90% of misconduct problems, and as low as 2% of police officers generate most citizen complaints (U.S. Dept. of Justice, 2001). Jackson et al. (2017) discussed managing officer behavioral risk using early intervention systems and identifying system design challenges for law enforcement and corrections environments. The need for each agency to conduct a proper assessment of misconduct is essential to improve police legitimacy, public cooperation, police organization integrity, and community protection. Moreover, Worden, Harris, and Mclean (2014) stressed the requirement for assessment and management of risk as it pertains to police misconduct.

In addition to CALEA, another level of compliance is to meet laws approved by the Civil Rights Commission compelling agencies to establish early warning systems to address police misconduct (Bazley et al., 2009). This legislation of the 1960s has fostered active civil litigation over decades that provided the oversight needed to better understand, identify, and observe the impact of misconduct on the community and democratic policing (Manning, 2005). Recent media coverage on the rollbacks of former President Obama's Challenge Policing 21st Century Initiative addresses the public's mistrust of operational procedures and culture of agencies as it pertains to UOF citizen complaints. One of the core principles of this initiative was to use technology and data to improve community policing (Department of Justice, 2015).

The criminal justice pendulum is swinging from the 21st century law using the due process model; prompting decision-making based on laws and citizens' rights. The Trump Administration supports the crime control model leaning towards police discretion (Cole, Smith, & DeJong, 2018). Efforts to expand the study of UOF as it pertains to violations and citizens may help to bridge this political gap and prevent consequences when law enforcement agencies balance the influence of opposing viewpoints.

The former U.S. Attorney General Jeff Sessions set limits to minimize Department of Justice police reform efforts and roll-back oversight and civil rights protective orders of consent decrees according to the Office of Attorney General 2018, Heads of Civil Litigating Components United States Attorneys Memorandum (U.S. Dept. of Justice, 2018). Results of implementation of this new initiative would increase incidents and frequencies of UOF incidents. Without the protections afforded by this federal oversight, law enforcement agencies may suffer from expected consequences. The financial outcomes of police officer misconduct could threaten smaller agencies' existence if liability insurers raise premiums or cancel coverage (Schwartz, 2016).

The 1994 Violent Crime Control Act authorizes the U.S. Justice Department to sue law enforcement agencies due to misconduct becoming a "pattern or practice" of

abuse of citizens' rights and clear need to seek organizational reforms designed to end these abuses (Livingston, 1999). Walker and Archbold (2013) found new accountability in which police departments would enhance self-monitoring and learn from incidents that occur to develop proper and proactive corrective responses. This new accountability approach encourages maximizing the utility of existing EIS data. The examination of the correlation between UOF citizen complaints, UOF violations, race, gender, and officers' tenure is consistent with gaining greater knowledge of EIS data and thereby adding to greater agency transparency. This research was built upon existing knowledge and explored a deeper understanding of EIS indicators, decision making, and accountability.

Existing research is limited to differences in agency protocols, system maintenance, data collection, and resources that accurately evaluate the utility of the EIS system (Shjarback, 2015; U.S. Dept. of Justice, 2005). A process capable of assessing the effectiveness of an agency's EIS is needed, and Worden et al. (2014) suggested further research is warranted to accomplish this task. In this quantitative study, new baseline knowledge was revealed due to the examination of the correlation between EIS UOF citizen complaints, UOF violations, gender, race, and officers' tenure of a large, Midwestern law enforcement agency in the United States. This study can be customized to any size agency to identify explanatory variables using EIS data. Also, the use of EIS data could be proactive and integrated with other agency datasets to develop strategic intelligence. Presently, the EIS does not include a breakdown of intervention outcomes or case dispositions to be compared regionally or statewide. An example of a best practice with limited empirical support is the nationally acclaimed, Drug Abuse Resistance Education program (D.A.R.E.). It remained prevalent in some districts as a school-based drug prevention program and at one point received \$200 million annually (Rosenbaum, 2007). However, to date, its ineffectiveness is undocumented due to neglected and inconsistent scientific findings (Gandi, Murphy-Graham, Petrosino, Chrismer, & Weiss, 2007).

EIS is similar to D.A.R.E. in its prevalence in decision making and establishing best practices for law enforcement with limited research. To avoid a similar conclusion of effectiveness in the midst of changing political, economic and deregulation of protectors, it is imperative for EIS users to further efforts to add new knowledge. Descriptive correlational studies and program evaluations focusing on agencies rather than individual police behaviors and organizational performances will provide this gap in literature.

The effectiveness of the EIS is important when addressing the validity of the role of self-regulation, whether it is with individual officers or on an organizational basis. The following statistic will demonstrate the need for further investigational opportunities using EIS data. Over 3,000 criminal cases in a period of 10 years were investigated by a special task force that resulted from prosecutors investigating homophobic, sexist, and racist text that obstructed the disposition of these cases (The Guardian, 2015). Reformists may readily support law enforcement organizations to find solutions that protect due process rights and provide transparency to the public while maintaining crime control protocol.

Another benefit of integrating statistical information corresponding to administrative decisions, judicial processes, watchdog groups, and media outlets with EIS data is efficiency. Presently, existing EIS data are incomplete and limited to police disciplinary files and privacy regulations (Walker & Archbold, 2013). As an example, an investigation of New York City's Civilian Complaint Review Board of the 35,000 NYPD revealed some officers had not received a civilian complaint, but roughly 1,000 officers had complaints on file (CATO, 2015 & Maule, 2015). An officer was returned to his position having occurred over 50 complaints. (CATO, 2015) However, some officers have conducted some form of misconduct due to situational influences with or no substantial consequences. Some argue that it important to note the importance of proper use of force is also warranted and provides greater safety at times. EIS data provide limited information about violations, which could be misleading. Without changes to existing processes, the utility of EIS data and functionality will remain inadequate (CATO, 2015).

Many factors complicate conducting a study of the effectiveness of EIS because of the multiplicity of agency differences and lack of standardized data. According to The Buffalo News (2014), a Buffalo police officer was caught on camera slamming a citizen onto a car. This same officer was named in three citizen encounters that were adjudicated as civil rights lawsuits during a four-year time period. (The Buffalo News, 2014). The news media accounts and the public's perceptions may have some credibility addressing individual incidents that demand law enforcement to do a better job of addressing misconduct issues and finding solutions. Too often, the most extreme cases cause straightforward inferences of misconduct broadly on all officers' or agencies' complicity unto underserving officers and law enforcement agencies.

Lawsuits and media accounts should promote greater public access to information about misconduct outcomes and resolution strategies by law enforcement. Expanded use of the sunshine laws could improve community-police relations and better screen for recruits that would prohibit problem officers from obtaining employment at another agency without appropriate screening (Zansberg & Campos, 2004). Accessibility to postemployment histories, internal affairs data, and officer case histories would add pertinent information needed for sunshine laws as well. EIS performance indicators are essential in supporting, managing, and reporting the rate of these incidents. New EIS information pertaining to intervention and program evaluation outcomes could provide support services to the majority of non-violating officers and possess more significant potential for prevention of misconduct (Krimmel, Kochis, Lindenmuth, & Morreale, 2004).

Exploration of the phenomenon of police officer misconduct has led to a better understanding of police violations. This information provides insight needed for discipline, intervention, and support. Substantial contributions to the knowledge continuum include organizational culture (Armacost, 2003), social ecology (Kane, 2002), organizational justice (Wolfe & Piquero, 2011), abuse of power for personal benefit (Porter & Warrender, 2009), and racial bias and profiling (Novak, 2004). It is crucial that efforts are made to find reliable UOF correlations of misconduct within individual agencies to build a knowledge base instead of depending upon inconsistent definitions, data collection challenges, constricted etiology, and limited epidemiology of police misconduct (Kane & White, 2009).

Added to the outcomes of misconduct is the costly obligation of cities, police agencies, and taxpayers due to civil liability and litigation expenses (Ariel, Farrar, & Sutherland, 2015; Kappeler, 2006; Novak et al., 2003). Cost is an incentive for city officials and administration to construct statistical models using EIS data to help individual agencies identify key factors to promote and enhance best practices to curtail liability.

There is an increase in the number of civil cases related to police misconduct. The total payout in 2017 for the New York Police Department, NYPD, was \$308.2 million, whereas the payout was from \$92.4 million in 2007 and \$152 million in 2012 (CATO, 2015). Police departments assume the liability for individual officers. With the cost of police misconduct increasing, the public continues to protest against police misconduct to bring attention to perceived injustices.

Continued coverage of the NFL campaign to address police brutality and protests (Finck, 2018; Intravia, Piquero, & Piquero, 2018; Olsson, 2018) lacks scientific examination for structured reform that requires intentional national media placement focusing on individual experiences that increases public awareness (Callanan & Rosenberger, 2011). Efforts to curtail police misconduct incidents, investigations or outcomes create an environment that prompts speculation and suspicion. Many citizen complaints are not captured within the EIS process, therefore unreported cases are missing opportunities to gain new knowledge and enhance better decision-making. Empirical data equips law enforcement to address public concerns with outcome-driven information to build a dialogue with citizens to prevent UOF encounters in which police are indicted (Stinson, 2009), decrease UOF statistics (Buehler, 2016), and impede costly payouts. Elinson and Frosch (2015) mandated further inquiry of available data on police misconduct. Critical incidents that occurred in Ferguson and Baltimore could happen in any city at any time.

Purpose

Selection of a correlational, nonexperimental quantitative study for this investigation was based on the limited availability of quality data, appropriate access of subjects, and compliance with privacy regulations to conduct an experimental analysis for scientific inquiry. Johnson (2013) used a two-dimensional classification of nonexperimental quantitative research model that was adopted to guide this study. Archival EIS data analyzed for this study was obtained from the Police Data Initiative, which is a clearinghouse for law enforcement agencies to provide data for research and transparency.

Causality is not an outcome of this correlational study; even so, identifying relationships between variables possess the potential to enhance training and modify existing policies. Consequently, law enforcement agencies will have more information to base appropriate analysis or to develop strategies based on the outcome of the correlation of UOF violations and UOF citizen complaints or need for further study. Using this data will aid in determining the relational strength of said variables or lack thereof using EIS technology.

Changing social constructs and technology demand modifications and innovation in policing based on new inquiries (Tidd, Bessant, & Pavitt, 2005). The disruptive innovation theoretical framework has not been applied to law enforcement study often, and it may prove beneficial as this theory has advanced the study of education and healthcare (King & Baartartogtokih, 2015).

The variables examined in this study were (a) dependent–UOF misconduct and (b) independent–UOF officer violations and UOF citizen complaints characteristics. New knowledge found in this investigation between the relationship the UOF citizen complaints UOF violations, and the EIS using the disruptive innovation theory (DIT) has the potential to change how EIS data is used the values of these variables include the following:

UOF officer violations – Race of officer, gender and yrs. of experience

UOF citizen complainants - Race and gender

The selection of the DIT to frame this study was in response to existing research based on "bad apples" and "bad orchards" foundation. DIT focuses on the products and services rather than on individuals and organizations. In this study, an intentional effort was made to build upon existing knowledge and suggest using values and standards as products to serve the public better and using EIS data as the disruption to be stabilized and sustained for effectiveness. Using a theoretical lens than provided a broader scope allowed greater examination of police misconduct with objective capability modeled by business, healthcare, and education research (Ciasullo, Cosimato, & Pellicano, 2017). The disruptive process begins with targeting overlooked segments and delivering information that will provide greater functionality of EIS data. As it pertains to this study, UOF violations must respond, reflect, or explain the UOF complaints. UOF data were the disruptor that when analyzed and used effectively can sustain or lower levels of misconduct. In this study, further research using variables on a continuum of force could reduce and prevent police misconduct.

Different approaches will aid agencies in decision making and management concerning police misconduct (King & Baatartogtokh, 2015) and make suggestions for managers (Kennison, 2002) based on the closeness between the UOF violations and UOF citizen complaints. There is a link between citizen complaints or citizen satisfaction to police services rendered evidenced by EIS data (Rogge & Verschelde, 2013).

Research Questions and Hypotheses

R1: What, if any, is the relationship between UOF complaints and police officers' characteristics (race, gender, and tenure) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017?

R2: What, if any, is the relationship between UOF complaints and citizen complainants' characteristics (race and gender) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017?

 H_{01} : There is no relationship between UOF and police officers' characteristics (race, gender, and years on the force) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017 as determined using a chi-square test.

 H_{02} : There is no relationship between the UOF complaints and complainants' characteristics (race and gender) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017 as determined using a chi-square test.

Theoretical Framework

DIT refers to a process that determines a sustaining path or a clear path to identify outcomes and provide a statement of correlation using chi-square analysis. Regarding this study, a service-oriented function using EIS applications at the bottom of the market can move forward by using UOF violations, UOF complaints, and the early intervention variables to a level of stability (Christensen, Raynor, & McDonald, 2015).

This analysis directly relates to how the EIS data are used and answers research questions about the complaints use of force, violations, race, and gender as the disruptive innovation to examine if manipulation of these data will provide an opportunity for the agency to use this information to improve service and deploy service recovery.

The DIT model developed by Christensen (2015) provided the framework for this quantitative study. This theory has been successful in education, psychology, and business. Wu (year) used DIT to examine how regulations should challenge technologies, models, and practices. With this intention, interventions based on traditional rulemaking risk miscalibration.

Cortez (2014) promotes incorporating technology and expanding the use of EIS data as this dissertation suggest. DIT suggests that law enforcement operations and interventions pertaining to the UOF citizen complaints and UOF violations should be transparent and tested. Such interim measures and infringement decisions preferable to commitments are needed for policy development (King & Baatartogtokh, 2015). In this correlational study, the use of police misconduct (EIS data) and to examine the association with citizens' complaints and determined significance between the variables will prove valuable.

Nature of the Study

The literature review will provide information explaining how data analysis is appropriate, relevant, and consistent with this study's objectives. I coordinated the collection of EIS data and focused on statistics pertaining to the UOF violations, UOF citizen complaints, gender, and race. Due to the abundance of data, the age variable was also correlated in addition to race and gender. Using SPSS statistics, an assessment of public records from the Police Data Initiative were processed for statistical purposes. Manually processing of variables for consistency and creating dummy variables to view UOF variables on a continuum began the actual study.

Upon completion of data cleansing, the application of applied chi-square tests and multiple regression were applied to determine statistical significance between two independent variables. The results of the chi-square test and multiple regression analysis showed the statistical difference in the probabilities between the independent variables: race of officer/complaint, gender of officer/complainant, and years of service of officers.

Operational Definitions

This section provides scholarly definitions of keywords or terms that are germane to this study for operational and conceptional context.

Critical incident: A police action posing a risk to the life, liberty, or dignity of a citizen (Walker & Archbold, 2013).

Discretionary UOF: Individual officers' use of powers to be consistent with appropriateness based on law (Chapman, 2009).

Disruptive innovation: Analyzation of knowledge embeddedness and specificity of the variables and the identification of the variance of these variables will show an impact on the EIS and other classifications

EIS data: Specific data about the behavior of officers that aids in the timely detection of problematic behaviors or potential misconduct by appropriate interventions (NPD, 2016).

Excessive force: Conduct prohibited by law specifies that officers shall obey all authority and regulatory entities. Police Department Operations Manual provides this definition (Lindley, 2014).

Law violations: Inappropriate force, or aggravated conduct prohibited by law, requires that officers obey federal and states (a) felonious conduct (b) prohibited as a Class One Misdemeanor or (c) criminal conduct committed on duty or under color of authority was developed by Police Department Operations Manual (Lindley, 2014).

Police accountability: Walker and Archbold (2013) developed a definition for new police accountability that is consistent with this study as an effort to build on past reforms and develop

Police legitimacy: Citizens' assessment of police actions to follow laws that is justifiable and equitable (Bradford, Jackson, & Hough, 2013) and includes new strategies and programs to ensure the highest level of professionalism.

Police misconduct: A criminal active, corruption, and abuse of power (Doherty, 2017).

Substantiated: The allegation is supported by satisfactory evidence (NPD, 2016).

Unsubstantiated: Insufficient evidence to prove or disprove the allegation (NPD, 2016).

Assumptions

In the literature review, I will use these key terms and variables, UOF complaints, UOF violations, race, and gender to frame the following assumptions: (a) Data were correct and complete to be used for this study as intended and (b) study will provide a greater understanding of this phenomenon and answers the "why" question by expanding the use of EIS data (Lecture Notes, 2018). This study is meaningful in its corroboration of the democratic process of policing continues in the United States.

Scope and Delimitations

The Early Intervention System data from a large, Midwestern law enforcement agency in the United States represented a population of approximately 800,000 residents in 372 square miles serviced by 1,600 uniform officers. This data source answered the research questions based on the relationship between UOF complaints, UOF violations, gender, and race variables. The values of UOF complaints were substantiated; therefore, officers' data represented only violations. The correlation between dependent and independent variables showed little significance between these variables. Construct validity was addressed by the DIT and theoretical framework.

The process of delimitations was fairly complex initially in obtaining quality data needed to investigate UOF complaints and outcomes. Therefore, it was determined to focus on conducting research with one agency and follow studies would include comparing similar agencies. The agency selected was intelligence-led and excelled in community policing, and it also serves a diverse population. It was also decided to focus on the UOF statistics only for this initial analysis; however, this agency provides extensive data for research and transparency.

Limitations

There were two significant limitations to this study. One was that the availability of quality data limited this investigational study. The data were public records and secondary. There are many complex issues to capturing quality data by police agencies regarding complaints and the use of force data.

The second major limitation identified in this study substantiated that no causative conclusions would be made. Therefore, the focus was placed on the relationship between variables (see Babbie, 2017). Generalizations will not be made about complaints based on this study. Data did not include victims who did not make formal complaints or officers who were not flagged by EIS and found to have committed by the administration.

Significance

Using personnel records in accordance with privacy regulations, early warning systems will enhance the effectiveness of intelligence-led policing and enhance administrations' effort to serve and support police, officers, and the community (Maguire, 2000). Also, it will better enable law enforcement agencies to discuss their ability to prevent or exercise liability issues resulting from prevention efforts using integrated data with community policing, modest training, punitive measures, or other alternative intervention for "problem officers." Based on the characteristics of officers identified by this study, law enforcement will have information to make positive changes immediately using data based on the UOF citizen complaints and UOF policy violations (see Simmons, 2008; Walker, 2003).

Existing studies conducted by large agencies make up a high percentage of existing empirical knowledge regarding EIS. Opportunities exist for program evaluations, and studies of smaller agencies would contribute to filling the gap in the literature (Sharjack, 2015). Agencies of all sizes using EIS can make correlations, conduct case studies or program evaluations that can be predictive, and add transparency to departments' operations using this study. The Minneapolis, Minnesota, Police Department found a lack of effectiveness of EIS and corresponding policies to be opaque. Should critical incidents occur, this information would be on hand to discuss how the agency addresses misconduct with in-depth, fact-based discussion in greater detail than provided on agency websites; therefore, responses are proactive and transparent. For example, inappropriate language and attitudes violated policy and professionalism that generated the majority of police misconduct complaints. Moreover, nearly half of the complaints were dismissed within the Minnesota Police Department. Furst and Webster of the Star Tribune (2018) reported that the more serious complaints for this department cost \$60.8 million in claims from 2007 - 2017 This information shows a need to develop histories and locations of citizen complaints to identify patterns and frequencies of these occurrences to better address these issues.

The examination of patterns of UOF citizen complaints assist in introducing knowledge needed to implement positive social change. This study is needed to address the expansion and integration of EIS data with community policing. The findings of this study will contribute to building foundational knowledge essential to conduct more research based on individual agency EIS assessments and program evaluations.

Summary

Police misconduct is a growing problem in the United States. Consequently, the advancement and use of technology addresses the demand for greater transparency and accountability by law enforcement as public mistrust intensifies. The EIS is an effective tool for measuring effectiveness in addressing this police misconduct (Lersch, Bazley, & Mieczkowski, 2006). Existing research is limited to differences in agency protocols, system maintenance, data collection, and resources to accurately evaluate the effectiveness of the system (Shjarback, 2015). This study adds to the base of knowledge by rendering a correlational approach (Worden et al., 2014) that describes a process to address misconduct.

The focus of existing research has been on the bad apples identified as problem officers as the approximately 2% of officers who generate most of the citizen complaints (U.S. Dept. of Justice, 2001). Further examination of the values of the UOF citizen complaints and UOF police officer violations, in correlation with race, gender, and characteristics of violations, is a step in maximizing the available data using EIS and exploring new options.

Using an unconventional approach, the DIT supports taking incremental steps to investigate the relationship between UOF complaints, UOF violations, and race during a time of cultural upheaval and rolling back of civil rights protections is warranted. Chapter 2 will provide more detailed and structured reasons for this study.

Chapter 2: Literature Review

Introduction

In this study, a quantitative correlational analysis framed by the DIT investigates the relationship between UOF complaints and UOF officer violations with race and gender values from 2013 to 2017, applying EIS secondary data from a large, Midwestern law enforcement agency in the United States. The extent of the relationship between these variables and identified patterns that surface during a five period, 2013-2017. This information will help law enforcement administrations' ability to obtain a better understanding of agencies' need to examine organizational structure and its impact on the EIS's effectiveness as it relates to UOF violations and UOF citizen complaints. This police misconduct phenomenon was investigated by expanding the use of EIS data as it pertains to the purpose, significance, and need to explore these variables.

Many sources of information used were seminal, historical, and contemporary peer-reviewed literature including, but not limited to the following: *A Journal of Policy and Practice, Criminal Justice and Behavior, Police Quarterly, Police Executive Research Forum, Criminal Justice and Behaviors, Policing: An International Journal of Police Strategies & Management, CAN Research Independence Research, Criminal Justice Policy Review, Police Practice, and Research, SAGE, ProQuest, National Police Misconduct Statistics and Reporting Project, and COPS-Department of Justice, Walden University, and Google Scholar.*

Literature Search Strategy

Police Misconduct

For centuries, police misconduct has existed as inappropriate and illegal behavior. Police officers' misconduct undermines their ability to fulfill their roles and maintain public trust, and it compromises the integrity of their agencies (Jackson et al., 2017). Efforts to reduce police misconduct were supported by D'Alessio and Stolzenberg (2014) who indicated that organizational size, a full-time internal affairs unit and in-service training are fundamental in predicting and preventing misconduct.

In contrast, the EIS agencies' focus remains on the small percentage of individuals who commit violations or those flagged by an early warning system to address police misconduct. Using this approach, agency administrators expect non-violating officers, the agency, and other stakeholders to assume responsibility for actions committed by a few. Primary adherence to this method also impedes the goal of deterrence in addressing UOF police misconduct. Deterrence is a primary goal of police disciplinary systems. However, EIS's primary goal is to use available data to prevent continued police misconduct by identified officers. Harris and Worder (2014) analyzed data from a large police department in the Northeastern United States and found that officers who received substantially severe sanctions were more likely to receive future sustained complaints.

Continued misconduct lessens police legitimacy and compromises public cooperation (Harris & Worder, 2014). In this study, historical EIS data is used in a nonintrusive manner to protect the privacy of police officers while examining the effectiveness of EIS as it relates to UOF misconduct. It is important officers perceive EIS as beneficial. Refocusing attention on EIS data as a tool for prevention and identifying complainants' characteristics supports community policing. In addition, EIS data integrated with other agency datasets would also support community policing and training. If officers perceive EIS as unjust, adherence to a strict and unjust disciplinary system may also cause police misconduct (Harris & Worden, 2014) or noncompliance.

Other forms of deterrence include employee assistance programs and risk management programs (Worden et al., 2014) with proven success in helping to provide support for employees and correcting problematic behavior (Walker et al., 2000). The programs support reform efforts beneficial to both officers and the public (Walker et al., 2000). The use of EIS data impacts both internal and external stakeholders. Therefore, the building of private and public partnerships plays a role in reducing police misconduct (Resisig & Kane, 2014) and supports reform efforts advantageous to both officers and the public. As times have changed, so has the appropriateness of the application of UOF by police.

From the 15th century to the present day, law enforcement has held convictions about the legitimacy in shooting fleeing suspects or offenders. Traditionally, it was a justifiable rationale to use fatal force to stop criminal activity. Historically, it was justifiable for police to shoot anyone accused of committing felonies, including rape, murder, robbery, and sodomy, and it was punishable by death until the distinction between felonies and misdemeanors occurred (Boutwell, 1977).

Therefore, it is necessary to possess empirically based information using EIS data to respond to UOF inquiries with facts, transparency, and accountability. The public's inability to grasp the workings of this department or its agents does not negate the importance of public judgments and evaluations or the need to be informed (Mears, Tyler, & Gardner, 2015).

The court of public opinion may assume guilt before any formal investigation of an incident occurs. Chermak, McGarrell, and Gruenewald (2016) noted that media coverage of Rodney King, Michael Brown, Freddie Gray, and other similar cases increased the public's presumption of the police officers' guilt. Additional outcomes of these incidents included costly civil litigation, criminal prosecution, increased protests, and escalated tensions between the public and police.

According to Schwartz (2014), excessive police misconduct costs taxpayers and impacts all stakeholders negatively. The practice of shooting unarmed or fleeing suspects will not be accepted or perceived as responsible policing by a broad segment of a democratic society (Schwartz, 2014). Continued citizens' protests support efforts to prevent excessive UOF from becoming normalized. However, restrictions of officers' ability to use force do not negate their legitimate authority to do so (Mogin, 1980).

There is an immediate consequence to victims, stakeholders, and the general public when an incident of police misconduct occurs; resulting in police legitimacy and public cooperation being minimized (Harris & Worder, 2014). Police indemnification found that one city government paid approximately 99.98% of monies that plaintiffs recovered (Hassell, 2016). Hassell (2016) revealed that 44 of the largest agencies and 37 midsized and small agencies revealed 99.98% of the dollars filed by plaintiffs were based on alleged civil rights violations and paid by the government. Also, Hassell noted that

local governments representing 81 police agencies paid \$730 million between 2006 and 2011 on misconduct cases. As a result, law enforcement agencies are focusing on preventive activities and responding to officer misconduct proactively while navigating the various internal and external changes.

Recent political and economic trends about UOF challenge the efficacy of civil rights protectors concurrently with advancing efforts of law enforcement to have greater transparency and accountability. The continued rising cost of police misconduct may necessitate officers to incur greater personal and professional liability if the focus of decision making is based primarily on violations. According to a Memorandum Supporting Federal, State, Local, and Tribal Law Enforcement authored by the United States Attorney General, Jeff Sessions, March 2017, suggested revisiting individual officer's misconduct as well as recommended further scientific research be conducted to address issues about police misconduct. Examining data on characteristics of UOF complainants may help identify ways to de-escalate tensions during police and citizen encounters. Applying a different theoretical lens imparts new knowledge that could build on conventional theories and approaches as well as advance the study of UOF by police.

In a study conducted on police corruption scandals in Belgium, including the Netherlands and Great Britain, Punch (2010) supported focusing on agencies rather than individual officers and recognized misconduct as a systematic problem, challenged the rotten apple theory, and placed greater emphasis on "rotten orchards" theory. IvKovic (2009) also provided a rationale for agencies to address police misconduct from an organizational perspective and support efforts to conduct more research based on EIS data. Police misconduct remains a complex and multilayered issue within the framework of any theory to include rotten apples, rotten branches, and rotten orchards. An approach to promote the development of shared terminology, standardization of procedures, and collection of quality data could be the catalyst to conduct research needed to support, train, and discipline officers relating to police misconduct.

Police administrators depend upon EIS data to make decisions regarding discipline and to manage the risk of misconduct (Worden et al., 2013). The broader law enforcement community uses EIS as best practices for managing accountability, misconduct, and expanding risk management tools. The United States Commission on Civil Rights adheres 1994 The Violent Crime Control and Law Enforcement Act (Walker & MacDonald, 2008). In addition, the Commission Accreditation of Law Enforcement Agencies, United States Departments of Justice, the International Association of Chiefs of Police, and the Police Foundation have recommended using personnel early warning systems as identified by Canton et al. (2016) to characterize and address problematic police officers' behaviors.

Identifying individual officers' conduct is foundational to recognizing vital signs of police misconduct and developing interventions to design effective policies strategically. UOF citizen complaints are indicators used to identify police officer misconduct (Jackson et al., 2017). According to Shjarback (2015), it is important to note the effectiveness of the EIS is overstated as a result of Law Enforcement Management and Administrative Statistics (LEMAS) surveys of a large-scale evaluation. Traditional research about police misconduct is primarily based on individual officers' behaviors, large agencies, and key indicators. Data derived from a binomial regression analysis of 497 city police departments showed an organizational response leads to greater feasibility in managing, predicting, and addressing misconduct (Eitle & Stolzenberg, 2014).

This study builds upon existing foundational research for police agencies of all sizes and in any geographical area to examine UOF issues and EIS data to conduct the applicable analysis. In 2003, the Bureau of Justice Statistics (BJS) implemented an Arrest Related Death program to provide a yearly national census of citizens who die during the arrest or custody by state and local facilities while citizens under the authority of law enforcement personnel. Saving the lives of citizens and police officers is paramount to the pursuit of this research effort.

Early Intervention

EIS is a technology used by law enforcement agencies to collect, document, and analyze data identifying problematic behaviors exhibited by police officers. Funding, staffing, and selecting type of technology depends upon the size, geographic, and jurisdictions of the more than 12,000 agencies (BJS, 2016) across the United States. Limited standardization and the decentralization of EIS data present challenges to conducting robust, scientific investigations of UOF EIS research that is exhaustive and predictive. In a review of several United States police departments, Carton et al. (2016) found that existing EIS is ineffective in their attempts to identify at-risk officers.

Present EIS relies on standard thresholds and routinely on expert intuition from the administration. It is important to explore ways to add validity and reliability to findings of UOF research using EIS data. The Charlotte-Mecklenburg Police Department's (CMPD) EIS, found a new learning model, COMPSTAT, that predicted which officers were at risk for involvement with adverse events in the next year by decreasing false positives. To use threshold-based data, necessary steps to offer resources to maintain the system and implement immediate problem-solving is required (Carton et al., 2016).

Most scholars have focused on the changes and interventions regarding police officer behaviors at larger agencies (Shjarback, 2015). However, smaller agencies with limited resources can also employ models to meet their needs and capabilities while administering a formal early warning system. Schultz (2012) noted that biannual summaries of 18 categories of information obtained personnel records, internal affairs, and supervisors' input is readily tailored to meet the needs of various agencies. Categories, time frames, and interventions can be customized to meet individual agency needs (Schultz, 2012).

EIS flag officers exhibiting misconduct repetitively. A mistake, misjudgment, or error can occur in the best of circumstances. The system identifies patterns of behaviors, thereby not allowing for officer discretion and situational circumstances. The officers identified are the most consistent violators involved with the most extreme offenses for intervention. The term problem officer denotes a state of being problematic and is consistent with labeling. Dunham and Alpert (2015) developed the term, officers with performance problems conveys that performance can improve and be corrected with training. The Pittsburgh Bureau (PARS) identified top performers, underperformers, and problem officers that allowed for a comprehensive intervention for departments, offices, individuals, and the community. Also, the San Jose Police Department found that changes in culture are beneficial to policy modification and enhanced training (author, year). This department experienced a reduction in litigation, improved community relations, and improvement of informal support services (Walker, 2015). Harris (2016) encouraged scholars to broaden the scope of policing problem officers and adopt criminal career paradigm concepts that show deviant behavior over a period without using a framework of theoretical misconduct structure at the center. Moreover, risk management gives an alternative approach to enhance EIS and increases accountability, as well.

EIS monitors and manages misconduct of officers within an agency that provides the information needed for the development of risk management tools. The Officer-Civilian Interaction (OCI) School conducted a study of 118 matched graduates, and 118 controls explore personnel complaints, citizen complaints, UOF, and secondary arrests (author, year). Worden et al. (2013) found that OCI trainees made fewer proactive arrests and fewer arrests overall than the controls after training. Although training had advanced significantly, most of the EIS key indicators were developed years ago and have experienced little revision.

Since the 1980s, the EIS framework has developed and provided a progressive and technological system for police accountability that impacts risk management using key indicators. Structural commonalities that exist across departments include performance indicators, certain problematic behaviors, and interventions. Variables are found across departments' administration and operations, as well. As an example, the

below list includes common actions considered as misconduct across departments.

Citizen Complaints	Civil Litigation
Number of UOF	Notice of Intent to Sue
Preventable Motor Vehicle	Criminal Investigations
Accidents	
Abuse of Sick Leave	Discretionary Arrests
Habitual Tardiness	Incidents of Workplace Violence
Garnishment of Wages	Unusual Behaviors

(Shultz, 2012)

Figure 1. Common actions of police misconduct.

By the 1990s, professionals from the legal and academic arenas found legislature and reform efforts to be inefficient in reducing misconduct; more incidents increased due to greater public access to technology. Implementation of appropriate interventions is the key to a successful EI system implementation. Interventions are customized to meet the needs of the officer. Interventions include the following:

Counseling by an Immediate Supervisor	
Training	
Professional Counseling – (Personal & Family)	
Peer Officer Support	
Crisis Intervention Teams	
Reassignment & Relief from Duty	
Intervention Follow-Through	

(COPS, 2006)

Figure 2. Interventions.

Intervention is the key to successful EIS implementation. Interventions are customized to meet the needs of the officer (COPS, 2006) in adherence to the operational

and organizational requirements of the agency. There has been significant budgetary support, technological commitment, and administrative assistance in the implementation of EIS that warrant further investigation to increase accountability efforts, enhance training, and improve officer performance using measurable outcomes (Shultz, 2015).

EIS outcomes may be helpful with decision making involving measures of risk, misconduct, and vulnerability with individual police officers' overall performance. More research is needed to assess the effectiveness of the program as it pertains to the selection of problematic behaviors and corresponding interventions. Identifying lessons learned are crucial in avoiding inappropriate handling of catastrophic incidents such as Ferguson and Baltimore and other critical incidents (Shultz, 2015).

Each act of deviance and every misconduct behavior will not become EIS indicators; a multivariate study provided information about internal and external misdeeds. Using the bad apple and bad orchard theories, some researchers explain corruption regarding individual or group behavior. Thus, group dynamics play a role, as well. Activities include (a) oversight and protection of illegal activities, (b) kick-backs, (c) committing crimes, (d) using planted or fabricated evidence, (e) bribes, (f) violence beyond situation and cruelty, and (f) racially motivated actions and sexual harassment (Shultz, 2015). There are no winners in misconduct as the results can be costly litigation and harmful to the public and police; with decreased police legitimacy, it increases the higher risk for police by the public (Helsby et al., 2016), as well as a breakdown the democratic process. The United States Constitution holds police misconduct to constitutional liability. In a national study comprised of 81 police departments on police indemnification, Hassell (2016) found the city government paid 99.98% of the monies that plaintiffs recovered in civil suits alleging civil rights violations by law enforcement. Local governments spent \$730 million between 2006 and 2011. In Chicago from 2004 to 2014, an analysis of settlements found misconduct included excessive force during routine and traffic stops as well as physical injuries to women and children (Van et al., 2016).

There has been a significant increase in forcing departments to take proactive measures to reduce officer risk and to curtail misconduct (Archbold, 2014; Girod, 2013). Employment outcomes can include termination, suspension, demotion, or disciplinary action for officers and administrators; citizens can sue agencies and government entities as well. Officers can be criminally charged and convicted. These are the serious consequences that prompted law enforcement agencies to explore the benefits of implementing, monitoring, and evaluating EIS outcomes.

Adherence and outcomes to internal and external complaints about EIS may be based more on the administration of the system rather than the tool itself. The proper training and positiveness of deployment of a system would significantly increase the possibility of contemporary law enforcement to predict and prevent misconduct using an EIS (Mears et al., 2015).

Use of Force

UOF is necessary for the self-defense of the officer, protection of others, and to enforce comprehension of suspects. There has not been an official standardized definition of UOF. Limited reports provide minimal national data resources of incidents for which police officers have used excessive force or officer-involved incidents, particularly shootings. The BJS (2006) found that within large departments, the complaint rate for police UOF was 6.6 complaints per 100 sworn officers. Of these cases, 8% had enough information to substantiate disciplinary action against the officers (NIJ, 2016).

As a consequence of this missing quality, standardized data, the newly created National Use-of-Force Data Collection will provide information about UOF incidents to police and the public. Data will include incidents involving: 1) force resulting in death, 2) serious bodily injury, and 3) officers discharged the firearm at or in the direction of a person. One of the most critical elements of this data collection will differentiate between isolated incidents and trends involving these incidents. Participating police and federal law enforcement agencies are instructed to make monthly reports based on key indicators. (CJIS, 2017).

EIS excessive UOF indicators are identifiers of police violators; moreover, with continued research, these indicators may also show greater value in the prediction of police misconduct. Scholars and practitioners have studied the variables that cause or describe police misconduct. A meta-analytic study found correlates of police decision-making to use force, thereby supporting the need for a more in-depth study of EIS data. (Bolger, 2015).

A great deal of research has been conducted on UOF, however there still is more to learn. The more knowledge obtained about how and why UOF is conducted, the better it can be monitored, controlled or prevented. Kleinig (2014) applied a contractualist framework finding principles that decide the limit of UOF: 1) respect for states as a moral agent, 2) proportionately, 3) minimum force necessary, 4) ends likely to be accomplished, and 5) appropriate motivations that would assist with decision making. Determining actions among the principles that violate profiling, street justice over UOF, and handcuffing procedures. Reactions by the public to these actions' present major challenges for police administrators. Camera phones and YouTube has contributed to the public exposure of police misconduct. Research conducted by Brown (2016) addressed the influence of "policing" new visibility on front live officers' misconduct behavior. Findings showed online-file sharing of violent police incidents by public impact violence across most of the study participants.

In contrast, Pickett, Mancini, Mears, and Getz (2014) expressed the public's low level of knowledge of extensive criminal justice experience and reliance on media-based justice. More specifically, the evidence from a survey of 1,308 adult Floridians reveals that individuals with prior criminal justice experience are less likely to rely on the media for crime-related information. Media reliance is particularly firm with female respondents and with those with lower levels of knowledge about criminal punishment (Pickett et al., 2014). In a post-Ferguson era, more coverage on critical incidents, according to a time-series study, found that the number of fatal police shootings either increased or decreased (Campbell, Nix, & Maguire, 2018). There is a set legal determinant of excessive UOF that contradicts many views of public opinion. Federal Judge John Davies, who presided over the Rodney King case, explained how excessive UOF is determined. According to a sentencing memorandum about this case, of the total of 50 plus baton strikes, only the last six strikes were considered in the determination of as excessive ruling. The image of severely beaten, bloody, R. King is etched in the minds who followed this case. His facial fractures, head injuries, and leg fractures were found to be reasonable by the judge. When Rodney stopped resisting, the officer continued striking him, which changed the incident from reasonable to criminal due to excessive UOF (Levenson, 1993).

The public interpreted the actions of Mr. King as attempts to protecting himself and not resisting arrest to minimize his injuries as an attempt to save his life and could perceive as a double standard (Davis, 1994). Excessive UOF determinants are the defined standard, and the objective must be identified. The illustration below clearly negates any gray area; a determination is precise as cases are determined either reasonable or criminal. Therefore, to better understand police-citizen contacts, this study investigated perceptions and behaviors during encounters that result in physical resistance and force. This data showed that officers and citizens focus on different issues due to self-prescribed roles (Rojeck, Alpert, & Smith, 2012).

FORCE		
Reasonable	Criminal	
The incident with Rodney King raised	questions by the public: 1) what	

was the objective of the UOF specific to this incident, 2) what escalated the UOF

to the degree it was administered, and 3) what are the trends and patterns when police use this type of force? These unresolved public concerns spawned the LA riots, which resulted in 58 deaths, 2000 injuries, and cost taxpayers over a billion dollars (Johnson & Critual, 2007). The United States Supreme Court set a precedent with Graham v. Connor to address the powers granted to police and standards of reasonableness. Consequently, it is the appropriate level of force used consistently over some time that will ultimately reduce these incidents.

Based on a multi-wave national survey of police agencies, more than 80% of responding agencies follow this use-of-force continuum. UOF can include verbal commands, threats, gestures, which are non-violent gestures. EIS must capture both the non-violent and violent UOF police and citizen encounters (Klahm & Frank, 2014). More information needed to understand the escalation of incidents by police and citizens better.

Because of this continuum, flagging officers for problematic behaviors earlier in their careers and interventions will create positive and supportive intervention such as training, peer assistance, and employee assistance. Agencies also provide tactical training and equipment. However, resilience building, racial intelligence, and life coaching have not been substantially funded or implemented to facilitate emotional and mental preparedness among police officers to adequately perform in crisis mode and life-threatening situations (Andersen et al., 2015). The de-escalation approach supports efforts to use EIS data to aid recruits with more knowledge of the realities of chronic exposure to critical incidents and introduce them to practical solutions by using evidence-based exercises (Papazoglou & Andersen, 2014). The DI theory lens provides a service recovery approach to address the adverse outcomes and support positive change for police violators and the prevention of police misconduct.

Research suggests the incidents' location/type of assignment is also related to UOF police misconduct. Exploration of UOF violations and UOF citizen complaints will capture situational variables such as 1) officer assignment, 2) purpose of the encounter, 3) arrest activity, and 4) locality with high rates of crime as these variables contribute to the UOF phenomena (Brandlt & Stroshine, 2012). Police transparency and accountability must be evidence-based as the public is not only impacted by bias or inefficient data, but the police are susceptible to political and public pressure as well.

Political pressures can impact public opinion negatively about law enforcement (Adams, 2018) as evidenced by action perceived as *we vs. us* approach following several of Black Lives Matters incidents with Blue Live Matters, the Protect and Serve Act of 2018 legislature implemented by the current administration. The National Law Enforcement Officers Memorial Fund data showed 46 police shootings occurred in 2017, a drop from 67 in 2016. The consequences of any political influence replacing evidenced-based, technical information to determine policymaking and operations for law enforcement are critical to the safety of all in a democratic society, including law enforcement officers. The upcoming presidential election is volatile, and law enforcement must be positioned to be proactive, minimize risk, and accountable involving critical incidents.

A time-series study analysis revealed that the frequency and numbers of citizens killed by police are temporally unstable. There is no evidence that the number of fatal police shootings, either increased or decreased post-Ferguson (Campbell et al., 2017).

Post-Ferguson, time series analysis provided no evidence for a "Ferguson Effect" impacting police officers (Maguire, Nix & Campbell, 2017). Since 2016, the number of police shot has increased by 59 percent. Black Lives Matter or the most vulnerable populations of police abuse is not representative of the 7 out of 8 officers killed were killed by white males (King 2016).

Further research recommends that law enforcement agencies become learning organizations and enhance the continuous process of self-monitoring (Walker & Archbold, 2013). Nix and Wolfe (2015) found that 567 officers felt less motivated by negative media coverage. Self-legitimacy and confidence are key elements to the success of this particular role. The theory of Disruptive Theory refocuses on the data being the disruption rather than individual officers and organizations.

Law enforcement self-monitoring evidenced by the use of advanced technology curtails excessive UOF during police and citizen encounters. A review of five articles identified that body-worn video was shown to reduce the UOF incidents and crime rates for specific crime types and court costs. Public response to the body-worn video was varied as well as police responses (Cubitt, Lesic, Myers, & Corry, 2017). Advanced technology, additional training, and identifying ways to control or prevent police misconduct is an on-going priority of law enforcement.

Citizens' Complaints

A citizen's complaint is alleged misconduct or violation of a law or regulation by a law enforcement representative. Various agencies have different processes for filing complaints. Using data collected from a large municipal agency in the Southeastern United States, the study found significance between the number of citizen allegations of misconduct an officer receives and the officer's outcomes of productivity or violation (Lersch, 2001).

Officers with higher numbers of citizen complaints were found to engage in higher levels of productivity that supports broadening the scope of how EIS data is collected and analysed. Research revealed significant relationships were found between the types of activities an officer engaged in, situational factors, and the type of citizen allegations (Lersch, 2001). UOF complaints constitute a high number of complaints, and those that are substantiated may lead to costly litigation fees, additional training, and modification of existing policies.

According to the most recent statistics collected by the Bureau of Justice Statistics, data on citizen complaints about police UOF found these important points:

- During 2002 large State and Local law enforcement agencies, 5% of agencies, and 59% of officers received a total of 26,556 citizen complaints about police UOF.
- About a third of all force complaints in 2002 was not sustained (34%).
 Twenty-five percent were unfounded, 23% resulted in officers being exoneration, and 8% of citizens' complaints were sustained.
- EIS uses sustained force complaints as an indicator of excessive force results in an estimate of about 2,000 incidents of police use of excessive force among large agencies in 2002.

This breakdown exhibits the various dispositions of filed citizen complaints (Hickman, 2006).

Many complaints are not filed for a variety of reasons, including those issues surrounding vulnerable populations victims, criminal suspects, 'suspicious'', illegal aliens, and children. These groups may not report misconduct due to fear, retaliation, or humiliation. American police departments typically do not collect and distribute data on coercive practices (Kane, 2007). More studies are investigating sexually related misconduct of officers with prostitutes and police groupies (Stinson, Liederbach, Brewer, & Mathna, 2014). Much is still unknown about citizen complaints; collection of existing historical poses data mining activities that could gain new knowledge in this area.

This research promotes available EIS data focusing on police and citizens' characteristics possess the capability to provide more information needed for

sensitive issues and vulnerable populations. In addition, policy revision and training improvement processes may serve to reduce misconduct as it pertains to UOF violations with special populations.

A research study assessed the use of complaint data from eight cities, researchers. Terrill and Ingram (2016) found a relationship between the officer and citizen-based characteristics that provide a different perspective on citizen complaints. The findings included but not limited to 1) a small percentage of officers accounted for a disproportionate percentage of total complaints, 2) excessive force and discourtesy were common charges, 3) recruits or inexperienced officers represented higher than experienced officers, and 4) male and non-white complaints were more likely to allege officers with using excessive force. This study also found that Black complainants were less likely to have complaints sustained (Terrill & Ingram, 2016). Expanding the knowledge base on police misconduct requires various types of research.

According to 42 USC 14142, the United States Attorney General has the responsibility to obtain excessive UOF data of police officers. In response to 42 USC 14142, Bureau of Justice Statistics (BJS) collected data from 2003 to 2007 on citizen complaints about police UOF nationally. This data has limitations with reliability and validity as it is used to make comparisons for statistical reporting. However, it does provide potential to help support democratic policing, if provided a baseline on UOF comparative statistics (whereas demonstrated reliability & validity is possible). This data also shows active local checks on

police abuses. EIS systems identify patterns of excessive abuse by officers for appropriate interventions.

Using Chicago Police Department statistics, 55,915 UOF complaints from 1988 to 2018 will used to provide statistical information. A total of 241,915 complaints found revealed that only 7% of the officers received disciplinary action. Approximately 1% of the officers were identified as responsible for 10% of the allegations. This study supports the "bad apples" theory but may also indicate the need for further investigation of this issue to determine basic questions of who, what, and why of citizen complaints and UOF violations occur.

Justice News reported that the Chicago Police Department (CPD) engaged in a pattern or practice of using force, including deadly force, in violation of the Constitution. The pattern or practice resulted from systemic deficiencies in training and accountability, including two primary issues, train officers in deescalation, and failure to conduct investigations of uses of force (DOJ, 2017). Consequently, support shifts to the "orchard" concept in addressing the need for organizational and cultural changes to address police accountability using advanced technology and further academic research.

Technology is an integral and essential activity with expert assistance as a part of investigating citizen complaints with Geographic Information Systems (GIS) as this method provides numerous services that hold police officers accountable. This data provides characteristics about complaints such as 1) type of complaints, 2) location of the incident, and 3) address of complaint and varies census driven data sets (Lawton, Piquero, Hickman, & Greene, 2001).

Ariel et al. (2015) used a quantitative investigation about the relationship between the use of body cameras worn by police officers and citizen complaints. Findings revealed the number of complaints filed against officers dropped from 0.7 complaints per 1,000 per contacts to 0.07 per contacts.

These findings are consistent with the benefits of extrapolating information from the EIS system to improve data collection processes and to better understand the relationship between UOF complaints and UOF violations.

Results of another study based on a large mid-western police agency found arrest activity, officer age, and gender are most strongly related to the receipt of citizen's complaints about excessive UOF. This approach differentiates high-complaint officers from low-complaint officers (Brandl, Stroshine, & Frank, 2001).

Citizen complaints serve as indicators for the agency of officers who need intervention before an incident that could escalate safety for the suspects and officers as well. EIS data is available to be used as a tool for prevention suggested by this longitudinal study of a cohort of recruits relating to onset of police misconduct (Harris, 2014). Cross-sectional distributions of complaints, UOF across officers is consistent with a small number of officers accounting for misconduct. There are some ambiguous indicators when comparing citizen complaints and UOF variables. By expert judgment or empirical investigation assumptions about each complaint or UOF report being valid is not reasonable. Operationally, EIS produce false positives that present implications and the need for further investigation regarding accuracy and validation. (Worden et al., 2014).

Considerable research has been conducted on UOF by police researchers for the past few decades. However, the focus has shifted from excessive or lethal force to describe a broad range of police behaviors that are coercive but are not necessarily lethal, violent, or physical. It is essential to understand better how such behavior can escalate from routine traffic stops into critical incidents that may include lethal force.

A systematic review of 53 police UOF studies published in peer-reviewed outlets revealed that 72 percent of the studies failed to cite a conceptualized definition of this construct. There is little consistency in the type of police behaviors operationalized as UOF across studies. This research proposes that agencies make foundational steps to gain additional utilization of EIS data as it pertains to citizen complaints and UOF violations on an individual agency basis (Frank, Frank, & Liederbach, 2014).

Further investigation of police encounters with citizens resulting in critical incidents found some complainants who objected to disrespectful treatment included an admission of wrongdoing on their part, contradicting the assumption of suspects lodging complaints to deflect attention from their actions. A systematic empirical analysis of 2,910 complaints in 12 months regarding police in New South Wales and Australia finding supports using the Disruptive

Innovation Theory as it also corroborates moving towards integrating "customer service" models to improve public satisfaction with police (Frank, Frank, & Liederbach, 2014). Changes must occur as citizens are not limited to formally making a complaint with police agencies have options to work with attorneys, advocacy groups, and media outlets.

Citizen complaints have changed from a verbal recall of incidents into actual videotaping and posting actual incidents on social media using phone cameras. Mounting more negative encounters are continully recorded, the YouTube effect and the concept of Prolepticon are at unmatched levels of scrutiny towards policing is becoming more prolific. It has not been substantiated if police act more guarded and professionally or pulled back for fear of encounters being videotaped and misunderstood (Singh, 2017). Police administration must utilize all data sources, including expanding data analysis with the EIS system that will provide greater transparency and accountability.

Law enforcement has attempted to curtail videotaping of police-citizen encounters. However, the courts have dismissed lawsuits against citizens for videotaping police arguing this violation of recording the police has not been "clearly established." Citizens have been arrested for videotaping or recording police under violating state wiretapping status. As a consequence, citizens are filing lawsuits claiming these arrests violate their First Amendment rights (Potere, 2012).

Race

Race and police relations are being nationally debated in the United States, as evidenced by NFL players' protest against police violence (Intravia et al., 2018; Mollett, 2017 & Schimmel, 2017). Consequently, Black Lives Matters' and other resistance organizations continue ongoing protests. There is a persuasive racial tension in the United States due to the present political culture (Abramowitz & McCoy, 2019; & Dillard, 2018), this divisive rhetoric and rollback of civil right sanctions may impact the law enforcement on an individual and organizational basis. The majority of police officers are not flagged by EIS, and therefore, it appears more officers are abiding by the law in the performance of their duties within this unstable environment.

Police Foundation's study conducted a telephone survey of 900 American police officers about their attitudes toward abuse of authority. These studies concluded: 1) UOF is relatively rare occurrence, 2) it is unacceptable to use more force than legal allowance, 3) it is not unusual for officers to ignore improper conduct by fellow officers, 4) training and education are effective ways to reduce police officers, 5) departments chief and front-line supervisors play a significant role in reducing abuse, and 6) community-policing reduces or has no impact upon potential abuse (Weisbard, Greespan, Hamilton, Williams, & Bryant, 2000).

National Police Research Platform conducted a national survey of police officers' reactions to high-profile fatal encounters between Black victims and law enforcement. Key findings 1) 86% report their jobs are harder as a result

2) 93% of officers are more concerned about personal safety

3) Created higher tension between Blacks and police

4) 72% of officers hesitant to carry out routine duties

(Pew Research Center, 2016).

Another study conducted used a sample of 8,000 policemen and policewomen responses to a national discussion on the fatal force by police. This widening gap between public opinion and police perceptions needs further research, community engagement, and greater accountability from the police.

Efforts must be taken to bridge this gap to avoid another national crisis, and continued corrosion of citizens' constitutional rights (Gaines, 2012) and place greater scrutiny of police legitimacy as it pertains to minorities, immigrants and the disenfranchised. Policing in America is immersed in racism, and this study shows how significantly the perspectives of officers' performance and practices have changed over the years. However, to acknowledge this change, it must be understood within the historical and political structures of the evolution of police misconduct and minorities.

According to 2013 statistics, over 79% of police officers in the United States are white males, and many are of Irish heritage. Black officers represent only 13% of law enforcement officers (Data US, 2018). Initially, the Irish fled their country's oppression and came to America to find an ingrained social order based on the class and as well as the color of skin. (Igntiev, 2009). Assimilation was not immediate; the Irish were referred to as "paddy" possessing ape-like features and considered racially inferior to Anglo-Saxons.

Characterizations of Irish were overstated as extremely violent and drunkards, as the anti-black movement continued to grow, for sociological, economic, political, and environmental reasons, Irish were assimilated into the white race (Kenny, 2006). Their new identity meshed with their role of slave catchers to enforce The Black Codes. This special patrol was given authority informally but was later established as the early police force in the United States. From the beginning, the race has been much more complicated than the hue of skin, it has been used to explain status or class by way of hereditary, phrenologically, and with physiognomics that continue to be disputed, debated or in some cases debunked. Even today, race is used as a divisive and political tool (Lopez, 2015) to justify economic and social justice disparities.

It has been over 200 years since the antebellum decades and less than 70 years since 42.U.S.C. Section 1983 Civil Rights laws were enacted. Reform were made and the need for mandates to address issues of disparity is yet needed today. However, there is a dichotomous relationship stemming from a historical basis of legitimizing and perpetuating racial injustice as issues of law and race intercept (Halpern, 1995). Incidents such as occurred in Ferguson, Missouri, and New York raised protests, awareness, and concern at the rate of Black males being shot by police.

A response to address racial unconstitutional bias and misconduct by police was provided by the 1994 Violent Crime Control and Law Enforcement Act was the Department of Justice Civil Rights Division the power to investigate state and local agencies. This change addresses the systematic misconduct of the apple orchard theory and agency characteristics rather than focus on bad apples. Over ten agencies have experienced the Department of Justice (DOJ) investigation in the past two decades. Discrimination and unconstitutional activity are primary misconducts that require DOJ intervention (Police Executive Research Forum, 2013).

Intervention does not have to be intrusive, expensive, or punitive; for example, Austin and Portland agencies cooperated with DOJ and expedited the process by making departmental changes. Austin did not require a formal agreement. The Special Litigation Section only investigates agencies, not individuals that could further the use of EIS data to examine correlations between variables such as UOF officer violations and UOF citizen complaints if such information is needed. EISs' implementation was a part of decrees for Los Angeles, Cincinnati, Pittsburgh, and Washington, D.C. (Police Executive Research Forum, 2013) and many of these federal investigations stem from patterns of UOF and police misconduct.

Using EIS data to better handle UOF violations could prevent federal investigations by addressing individual cases and using this data to identify patterns of officers' and complainants' characteristics that could add to the knowledge of how some complaints like actions can also de-escalated and followed up with service recovery to settle issues and establish a sustainability for police misconduct standard. Therefore, the application of DIT uses the data as the disruption to identify patterns and provide service recovery deemed accountable by society. These encounters are not limited to this national audience but have international consequences as well.

The use of deadly force against Blacks disproportionately is also a violation of international law. Also, the Fourth Amendment of the United States Constitution protects all citizens from deprivation of life, liberty or property, and guarantees equal protection for all United States citizens under the law (Nascimento, 2017). The academic and law precepts are less practical with experiential the application. However, it is important to note that real-life encounters have proven that these applications are adhered to by the majority of law enforcement officers. Police violence and race are an emotionally charged and complex topic further complicated by diverse political and historical positions; and opposing contemporary explanations of related police and citizen encounters. Hughley (2015) recommends using these five categories to address this multi-dimensional process of justification of social and racial inequality: 1) ideologies, 2) institutions, 3) interest, 4) identities, and 5) interactions.

Philosophical and academic contributions to police officer misconduct must be outcome-based, measurable, and practical to the point of incorporation with existing policies. Though obtainable, adherence to laws in real-time and situational crises is challenging. The police may have minutes or seconds to make judgment calls. Kakar (2006) found that cognitive "short-cuts" may influence officer UOF encounters with citizens. Racial bias amplifies tensions that lead to excessive use of force if acted on triggered by cognitive short cuts or implied bias. This may cause racial disparities in stops, arrests, and may escalate the UOF activities.

Unchecked, the number of incidents with law enforcement may increase as well as can be duplicated with Disproportionate Minority Contact (DMC) by school resource officers facing similar challenges and experiences (Kakar, 2006). Police reliance on suspicious non-verbal cues could also indicate an inappropriate response behavior with racial or ethnic characteristics such as lack of eye contact, inappropriate smiles, and other acts deemed inappropriate or disrespectful to authority (Johnson, 2007).

Using a linear mixed-effects model with a sample of one hundred and thirty-nine UOF cases including, 62 Whites, 42 Blacks, and 35 Latinos, from a medium-sized agency in the U.S., had significant findings. UOF compared to suspect race, time suspect resistance, and suspect actions revealed Black and Latino suspects receive more force at the beginning of the interaction (Kahn, Steel, McMahon, & Stewart, 2017). Blacks and Hispanics are more likely to experience some form of force interactions with police (Frye, 2016). Police shot three unarmed 15-year-old black boys in one month in Dallas, Connecticut, and California (King, 2017). In contrast, racism does not explain the high police lethality rates in Montana, West Virginia, and Wyoming, where perpetrators and victims of deadly force are White (Hirschfield, 2015). The United States has high rates of lethal force when compared to other countries. Some variables could contribute to these high rates more than or equal to aggression and racism. Further examination of this issue is dependent upon available quality data.

However, of nearly 6,300 deaths reported in six years, approximately 1,800 were Black males. This group of minorities is identified as being shot at a rate of 8 times higher than others (Scott, 2018). As more officers are convicted of shooting or killing Black males (Andrews, 2018) will escalate tensions and will demand a change law enforcement to address accountability issues to resolve issues quicker and with greater transparency. Reform or reduction of misconduct has not been a proven strategy with criminal prosecution (Walker & Macdonald, 2008).

Another study examined police officers' decisions to shoot Black and White criminal suspects as viewed on a computer simulation. The officers were more likely to mistakenly shoot unarmed Black suspects as compared with unarmed White suspects. Extensive training of officers has proven to be effective in eliminating bias (Plant & Peruche, 2005). On the contrary, these incidents support the bad apples theory. This researcher suggests that EIS data may serve as a statistical guide rather than an intervention, mainly if an organizational approach is applied. Orchard theories examine patterns and practices that violate constitutional laws involving repetitions of police misconduct that show this behavior has become adaptive, and the agency lacks the moral or professional judgment to monitor or self-regulate needed correction. The structure of the law enforcement system is decentralized and divided into federal, state, and local jurisdictions, and each branch is responsible for police accountability in some measure. Accreditation for law enforcement agencies that provide standards in reducing police misconduct is voluntary (Walker &Macdonald, 2008). A large percentage of police agencies have undergone structural reform litigation. (Rushin, 2014). In summary, it appears there is an issue with why and how police exercise UOF by all races, and it is more prevalent and apparent with minorities and vulnerable populations.

Gender

The review of women officers concerning UOF is limited and inconsistent. Women have made tremendous advancement in law enforcement within a relatively short period. The first professional role of women in law enforcement was that of a prison matron. With strict Queen Victoria's influence at the time, reformers were adamant that women would be better suited for this task (Rabe-Hemp, (2017).

The courts rejected height and weight standards for selection criteria and found standards to be discriminatory under Title VII of the 1964 Civil Rights Act. Studies have proven the ability of women to meet and exceed performance measurements evidenced by injuries, citizen complaints, accident assaults, and commendations (Lonsway et al., 2003). For example, an extensive sample survey of female and male officers in six departments found female officers and same-gender female-female officer pairs used less force than males. Women officers are also less likely to use physical force. Also, findings showed that citizens significantly used more force against female officers during domestic calls (Shuck & Rabe-Hemp, 2007; and Sherman, 1975).

In contrast, a study using data from 464 law enforcement agencies drawn from the Law Enforcement Administrative and Management Statistics survey reported receiving a total of 18,711 citizen complaints in 2003, (6.7 sustained) and 22,146 citizen complaints in 2007 (8% sustained). Women police officers accounted for 11% of sworn officers under investigation ranging from 14% to 40.1%, up from 2003 when the average was 10.1%. Research findings revealed an increase in female representation in police organizations is a catalyst by which certain norms or practices may become normalized when using disruption theory (Schuck & Rabe-Hemp, 2016).

Workplace issues and stressors are common to all police officers; the traditionally general nature of organizational causes stressors for women may account for these findings (Morash & Haar, 1995). Organizational and societal constructs reinforce women's subordination to new in the field dominated by men. Some women police officers had to face a gamut of barriers and concerns to include: sexual harassment, differential assignments, and pay differentials (Marin & Jurick, 2006).

This study of tokenism may explain workplace issues for women to an extent. This quantitative examination of race and gender using a tokenism theory found those described as token police do experience the effects of tokenism. Black males and females experienced more significant levels of tokenism than Latino officers. Therefore, the results revealed that using a linear mixed-effects model with a sample of race status alone predicted higher than gender regarding tokenism consequences (Stroshine & Brandl, 2011; Gustafon, 2008)

Theory Foundation

This research began with review of deviance theories and progressed to deterrence theories in addressing police misconduct as behavioral (Harris & Worden, 2014; Young & Taylor, 2013; Akers, 2017; & Walker, Alpert, & Kenney, 2001) to address the behavior and actions of officers. Also, the racial threat theory can be applied as a theoretical framework to explain racial disparity as it pertains to the use of excessive force by police; it elucidates population composition that influences social control practices (Dollar, 2014).

This foundational study questions traditional EIS data to task traditional theories and encourage new approaches. A relatively newer approach, COMPSTAT, is an innovative and highly recognized management and technological system that was implemented in 1994. A study of the system at three different sites concluded private companies are driven by efficiency, profit, and branding.

By contrast, police agencies are required to adhere to constitutional and operational guidelines impacted by public scrutiny, as well as influenced by political and economic influences. Disruptive Innovation Theory is suitable for use with technical model, EIS software product, and more applicable in generating information for greater EIS functionality (Willis, Mastrofski, & Weisburd, 2007). This methodological approach expands, challenges, and extricates from the traditional and established "bad apples" and "bad orchard" theories.

The researcher performed a correlational analysis of the variables, UOF complaints, violations, gender, and race using EIS data, citing misconduct as an innovative disruption for police misconduct. The disruptive innovative theory could prove to be predictive as it may lead to broadening data collection, expand analyses, and formulate better decisions with further investigation. Police misconduct incorporates and impacts many stakeholders, such as city officials, taxpayers, community-at-large, law enforcement agencies, and all individual law enforcement officers (King & Baatartogtokh, 2015).

This seminal study, disruptive innovative theory, was established by Harvard Professor Clayton M. Christensen in 1997 and has evolved over the past twenty years to obtain the respect of academia. Dr. Christensen, herald and leading management thinker, in the world. Application of this model with EIS data will move forward in identifying service functions, indicators, and interventions from the bottom for the agency examined. Small businesses and well-established organizations, including Intel and Salesforce, have received success from using this model. Different strategies launch various types of innovation. Newmarket footholds create a market where none existed (Christensen, Raynor, & McDonald, 2015; Brandt & Barton, 2018). Uber did not follow the model as suggested but identified the properties of this theoretical framework to find success. This theory has been misapplied and misunderstood as it had to develop the research rigor required by academia (Christensen, Raynor, & McDonald, 2015). It is important to establish the nature of the study before application can solidly formed.

Using the coined, Big Idea (BI) by Dr. Christensen for disruptive innovation theory, the BI framework will have UOF complaints as the disruption, the response is EIS indication and intervention. It is necessary to identify incremental advances to breakthroughs that are consistent with using this one indicator for analysis. This process takes a sustaining path as this quantitative study investigates outcomes and develops a statement of correlation. Further research on this phenomenon may promote predictability using EIS data.

Dr. Christensen applied this management tool to the field of education to assist with the challenges of public education and to improve various processes following an established business model. Public education has many similarities to law enforcement, such as a hierarchical structure with federal and state law requirements, and economic restraints. Law enforcement officers and educators share these similarities: 1) political influences, 2) public scrutiny, 3) accreditation standards, 4) customer diversity, and 5) serve as front-line workers with excessive responsibility and scrutiny. An analysis of the role of "disruptive" innovative technologies in higher education revealed that learners used a narrow range of technologies and found range of technologies is used for multiple tasks. This study supports expanding the utility and exploring the efficacy of the EIS in policing (Flavin, 2012).

Chapter 3: Research Method

Introduction

In this quantitative study, EIS archival data from Police Initiative Data (PDI) for a large, Midwestern law enforcement agency in the United States from 2013 to 2017 is examined. This agency has an established community policing philosophy foundation and has incorporated multiple policing strategies for crime control and implementation of prevention strategies. This chapter will provide the methodology that consists of data collection, operationalization of variables, and research questions and hypotheses.

EIS data used for this study were a primary source of information integrated with other agency datasets that provided measurable outcomes and benchmarks. Using EIS data as the disruptor framed by the DI theory, this study serves as a small step to bring greater clarification and specification to the UOF variables. DIT is a business model presented as a theoretical model for this study to focus on a problem that can be quantified and used to impact the bottom line (Sekaran & Bougie, 2016).

The selection of chi-square and multiple logistic regression methods were chosen primarily on the availability of the EIS secondary dataset from one law enforcement agency in the United States from 2013- 2017, which would allow for repeatability of results and systematic interrelation of variables (Kothari, 2004). In the absence of quality, accessible experimental data, and time, choosing this date limited the development of research questions. Primary UOF variables help to use existing data as a starting point appropriate in introducing a new theoretical approach (White, 2017). An experimental study would have required time, finances, and human power other than allocated for this study. A nonexperimental design was feasible, and it meets statistical conclusion validity (Johnson, 2001). Correlation evidence can provide measurement (Thompson, Diamond, McWilliam, Snyder, & Snyder, 2005). In this correlational study, investigation of this relationship between the dependent and independent variables with goodness to fit was done. This design tested the null hypothesis with no attempt to provide predictability or causality (Rumrill, 2004).

Contingency tables (2 x 2) were used to illustrate the correlations of the variables. The chi-square was used to test the null hypothesis that frequency was expected (Preacher, 2001). Multiple regressions with chi-square also was used to test hypotheses and to provide estimations of the size of effects (see Cohen, West, & Aiken, 2014). This application identified the mean square by using more powerful testing procedure of the variables (see Toro-Vizcarricondo & Wallace, 1968).

An activity calendar was established to contain data collection, analysis, and reporting. Data were analyzed using SPSS, including (a) dependent variable (UOF complaints) and (b) independent variables (UFO violations and complaints). EIS data used was released by the government as a public record. EIS datasets of UOF information answered the research questions as well as tested the hypotheses. Using secondary data sets allowed the opportunity to build expertise and create a potential for higher productivity of EIS data within a limited time frame and with limited resources (Smith et al., 2011).

Data Collection

Sample and Data Source

Law enforcement agencies are using various sites to distribute data to address accountability and transparency issues. Multiple national websites that publish law enforcement agency data. The dataset for this study was secondary data found on the PDI website. PDI provides open data for use by technologists, researchers, and law enforcement agencies. It represents the work of over 130 law enforcement agencies (PDI, 2019). The agency selected for this study was located in the Midwestern region of the United States and represented data from 2013-2017. This agency serves a population of over 800,000 residents living in 372 square miles served by approximately 1,600 officers.

The sample for this study was drawn from the internal police database as sustained complaints. For every sustained complaint, this database records the following: (a) the type of complaint was sustained, (b) the demographics of citizen complainant, and (c) The demographics of the violating officer involved in these incidents.

Type of complaints: UOF complaints used for this study are presented in Appendix A and categorized in three areas: (a) UOF violating rights, (b) UOF aggressive behavior and language, and (c) UOF excessive physical force. These categories can be useful for further study of exploring characteristics of UOF variables on a continuum extending beyond the scope of this study to expand the functionality and value of EIS data. It is necessary to expand system identification and data collection beyond these basic variables: citizen complainant and officer demographics: sex (male/female), race (Asian, biracial, Black, Hispanic, Unknown, and White) these variables were recoded to match other race complaints needed to conduct a valid correlation.

From data collection to analysis, it took approximately one week using baseline descriptive characteristics. The total number of UOF citizen complaints were 1,961. The UOF complaints were compared to other complaints. A limitation of the study was that the number of unsubstantiated complaints and the number of non-violating officers were excluded from dataset.

This analysis determined the relationship by comparing independent variables to establish the impact on the dependent variable. The correlational relationship with one or more independent variable, and the dependent variable was appropriate for empirical investigation (see Creswell, 2009).

Dependent Variables–UOF complaints

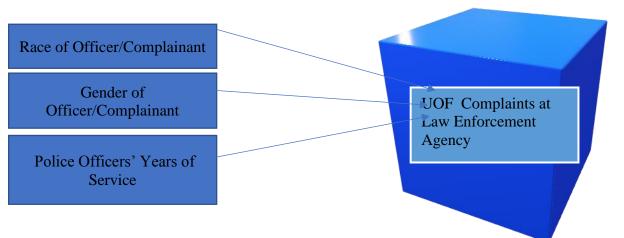
Independent Variables–(Violators) Officers' characteristics -race, gender & yrs. of work exp.

Independent Variables (Complainants) - Race and Gender

Conceptual Model

Independent Variables

Dependent Variables



This correlational, nonexperimental study included chi-square and multiple regression analysis to ascertain the relationship between the UF complaints, UOF violations, gender, and race at the selected agency. This analysis accepted the null hypothesis (see Creswell, 2009).

Table 1

Variables	Data	Values	Low	High
	Level		Value	Value
Unnecessary Use of Force	Nominal	0 – Other Complaint		
(A Category of "type of		1 – Unnecessary	0	1
complaint" see Appendix A)		Use of Force (UOF)		
Complainant Ethnicity	Nominal	1 – Asian		
		2 – Black		
		3 – Hispanic	1	4
		4 – White		
Violating Officer Ethnicity	Nominal	1 – Asian		
		2 – Black		
		3 – Hispanic	1	4
		4 – White		
Complainant Gender	Nominal	1 – Male	1	2
•		2 - Female		
Violating Officer Gender	Nominal	1 – Male	1	2
0		2 - Female		
Complainant Age	Ratio	Continuous – n/a	15	75
Violating Officer Age	Ratio	Continuous – n/a	22	73
Officer Years of Service	Ratio	Continuous – n/a	1	43

Defining Variables

Research Questions and Hypotheses

R1: What, if any, is the relationship between UOF complaints and police officers' characteristics (race, gender, and tenure) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017?

R2: What, if any, is the relationship between UOF complaints and citizen

complainants' characteristics (race and gender) at a large, Midwestern law enforcement

agency in the United States from 2013 to 2017?

 H_{01} : There is no relationship between UOF and police officers' characteristics (race, gender, and years on the force) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017 as determined using a chi-square test.

 H_{02} : There is no relationship between the UOF complaints and complainants' characteristics (race and gender) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017 as determined using a chi-square test.

The central focus in the development of research questions was police misconduct as it related the UOF and used to frame the hypotheses. Using secondary data protected the privacy of officers and complainants during this sensitive discussion and removed possible harm for participants (see Babbie, 2017).

Conclusion

This nonexperimental quantitative study was designed to determine if there was a correlation between UOF citizen complaints (race and gender) and UOF violations (race, gender, and years of service) using EIS data. Initially, these variables were selected due to the limitation of available data. However, these primary variables were appropriate because they were consistent with existing studies and used as basic EIS identifiers with a significant number of law enforcement agencies. Using these variables is also valuable in applying an innovative theoretical framework, DIT, rarely used in criminal justice study. For this research, the EIS data (information) is the disruptor, it disrupts the process and performanc of the officer. This information identifies opportunities to broaden the classification of variables. For example, with citizen complaints, development of research questions can investigate more than race and gender. For example, the addition

of age, level of educaiton and geographical locations of citizens would help pinpoint other issues that may require law enforcement to employ different methods or techniques for engagement that would minimize the need for UOF. Knowledge changes verbal engagement and non-verbal approaches from officers with citizens.

Moreover, using a continuum beginning with UOF-substantiated complaints to identify officers who engage in verbal harassment of citizens based on appropriateness and fairness. Benchmarks clarify data points for comparison and further study: (a) relevant criteria for making judgments and (b) the application of these criteria to a given situation for study. Using this continuum would help to de-escalate issues as well and provide supportive, corrective intervention for officers rather than punitive intermediation.

This analysis of the EIS data from the selected agency was used to determine the correlations of variables and explain the variances of measurement denoting relationships between these variables. Findings may identify ways to use, expand, and integrate EIS data for greater effectiveness. The use of EIS data in addressing this single item regarding UOF may have the adaptability to examine other EIS key indicators and variables.

The use of chi-square contingency tables will demonstrate the analysis between the UOF citizens (race and gender) complaints and UOF violations (race, gender, and years of service) from 2013 to 2017 for a large, Midwestern law enforcement agency. Pearson's chi-square test proves to be robust with cell frequencies (Camilli & Hopkins, 1987). In addition, a multiple regression was added to methodology to further investigate the relationship of multiple independent variables: resident (complaint) sex, officer sex number, resident (complaint) race, and officer race. The variable, officer years of service, as compared to resident race and officer race as well.

Multiple regression provides a way of interpreting relationships by examining the relationships between a set of conditions and the probability of an event occurring. Logistic regressions predict likelihoods by measuring probabilities (Sweet & Grace-Martin, 1999). The conclusion of these analyses will allow for acceptance or rejection of the null hypothesis.

Chapter 4: Results

Introduction

The purpose of this study was to investigate the UOF citizens' complaints, UOF violations, and the early intervention system. Increased police misconduct demands the need to apply a new approach to the use of EIS data to improve police performance, accountability, and transparency as it pertains to UOF indicators. The research questions were designed to investigate the relationship between UOF citizens' complaints (race and gender), UOF violations (race, gender, and years of service), and early intervention and to investigate the information gained by comparing these primary variables. Application of the theoretical framework, DIT was limited but probable in establishing a disruptor. In this quantitative, nonexperimental study, the exploration of the relationship between variables presented in these research questions may or may not reject the null hypothesis:

R1: What, if any, is the relationship between UOF complaints and police officers' characteristics (race, gender, and tenure) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017?

R2: What, if any, is the relationship between UOF complaints and citizen complainants' characteristics (race and gender) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017?

 H_01 : There is no relationship between UOF and police officers' characteristics (race, gender, and years on the force) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017 as determined using a chi-square test.

 H_02 : There is no relationship between the UOF complaints and complainants' characteristics (race and gender) at a large, Midwestern law enforcement agency in the United States from 2013 to 2017 as determined using a chi-square test.

The purpose of this correlational study was to investigate the UOF using early intervention data and test the null hypotheses. The dataset included citizens' complaints, and the UOF variables in three categories: (a) verbal, (b) aggressive, and (c) physical.

Data Collection

Sample and Data Source

Law enforcement agencies are using various sites to distribute data to address accountability and transparency issues. Multiple national websites publish law enforcement agency data. The dataset for this study was published on the PDI website. PDI provides open data for use by technologists, researchers, and law enforcement agencies. It represents the work of over 130 law enforcement agencies (PDI, 2019). The agency selected for this study was located in the Midwestern region of the United States and represented data from 2013-2017. This agency serves a population of over 800,000 residents living in 372 square miles served by approximately 1,600 officers.

The sample consist of sustained complaints the internal police database from the selected law enforcement agency. For every sustained complaint, this database records the following: (a) the type of complaint was sustained, (b) the demographics of citizen complainant, and (c) The demographics of the violating officer involved in these incidents.

Type of complaints: UOF complaints used for this study are presented in Appendix A and categorized in three areas: (a) UOF violating rights, (b) UOF aggressive behavior and language, and (c) UOF excessive physical force. These categories can be useful for further study of exploring characteristics of UOF variables on a continuum extending beyond the scope of this study to expand the functionality and value of EIS data. It is necessary to expand system identification and data collection beyond these basic variables: citizen complainant and officer demographics: sex (male/female), race (Asian, biracial, black, Hispanic, unknown, and white); these variables were recoded to match other race complaints needed to conduct a valid correlation.

From data collection to analysis, it took approximately 1 week using baseline descriptive characteristics. The total number of UOF citizen complaints were 1,961. The UOF complaints were compared to other complaints. A limitation of the study was that the number of unsubstantiated complaints and the number of non-violating officers was not included in the dataset.

Descriptive statistics are used to look at the general characteristics of the dataset and the variables examined in this dataset, as shown above. The main calculations used to summarize the variables, and the characteristics of the database include percentages.

Table 2

	Citizen Complainants	Violating Officer
Gender		
Male	54%	89%
Female	46%	11%
Total	100%	100%
Race		
Asian	4%	.1%
Black	48%	15.8%
Hispanic	2%	2.9%
White	49.6%	81.2%
Total	100%	100%

Descriptive Statistics

Hypothesis Testing Using Chi-Squared

SPSS was used to conduct statistical analysis, chi-square, t-test, and logistical regression to determine the relationships to test the hypotheses. All of these chi-squared analyses will be displayed in the following tables:

Table 3

Title of Table

	Other	Use of
	Complaint	Force
Male	45%	49%
Female	55%	51%
Total	100%	100%

A chi-squared analysis showed that there was no relationship between gender and use of force ($\chi 2 = .7, p = .54$). Therefore, the difference in proportion/percentage between males in the use of force category (49%) and males in the other complaint category (45%) was not significant.

This finding contrasts with other studies that show female officers are "more ethical" and willing to report misconduct than their male counterparts. Women used less force than their counterparts in some situations (Sherman, 1975; Shuck & Hemp, 2007). Rabe-Hemp (2008) found that women are much less likely than men to use extreme controlling behavior, such as threats, physical restraint, search, and arrest. Female representations represent norms or practices that are normalized (Schuck & Rabe-Hemp, 2016).

Table 4

Table Title

	Other	Use of
	Complaint	Force
Asian	0.1%	0.0%
Black	16.3%	16.7%
Hispanic	3.1%	2.3%
White	80.5%	80.9%
Total	100%.	100%

A chi-squared analysis showed that there was no relationship between the race of the officer and the use of force ($x^2 = .543$, p = .909). Therefore, the difference in proportion/percentage between race in the use of force category (80.9%) and males in the other complaint category (80.5%) was not significant.

Consistent with this finding, Croft (year) found that in comparison to "high force" and "low force" officers using background characteristics, the relationship with officer age and years of service was unrelated to race, gender, and other factors. These results also mirrored observational research data. Paoline and Terreill (2007) indicated that varying levels of education and experience were related to differences in the use of coercion during encounters with citizens.

A recent study using critical mass found the number of black citizens killed in encounters with police decrease when there is a significant number of black police officers (Nicholson-Crotty, Nicholson, and Fernandez (2017). Black officers represent only 13% of law enforcement officers (Data US, 2018).

	Other Complaint	Use of Force
Female	47.5%	33.9%
Male	52.5%	66.1%
Total	100%	100%

Figure 5:

Hypothesis 2.1 (Use of Force x Gender of Citizen Complainant)

A Chi-Squared analysis showed that there was a relationship between the

gender of citizen complainant and the *use of force* ($x^2 = 14.093$, p =.000).

Therefore, the difference in proportion/percentage between gender in the *use of force* category (66.1%) and males in the other complaint category (52.5%) is significant. Data is limited to the characteristics of citizens' complainants; this study's finding is consistent with other studies that male victims being more prevalent in use of force cases. Moreover, minority, poor, and younger suspects are more often engaged in excessive use of force incidents with inexperienced and less-educated males officers (Terrill & Mastrofski, 2002).

	Other	Use of
	Complaint	Force
Asian	0.1%	0.0%
Black	16.3%	16.7%
Hispanic	3.1%	2.3%
White	80.5%	80.9%
Total	100%.	100%

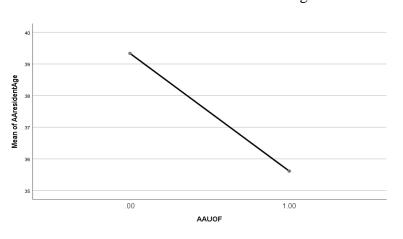
Hypothesis 2.1 (Use of Force x Race of Citizen Complainant) Figure 6:

A Chi-Squared analysis showed that there was no relationship between the *race* of citizen complainant and the *use of force* ($x^2 = 1.148$, p =.765). Therefore, being the difference in the proportion/percentage between race in the *use of force* category (80.9%) and (80.5%) with another complaint category.

Also, according to this analysis, the younger black resident males are more likely to be involved in UOF incidents, as shown in this chart:

Table 3

Mean of Resident Age





According to the World Population Review in 2013, the African American population increased significantly showing increase to be served by the selected law enforcement agency. However, the municipal area is only at 16% presently. Therefore, it is important to note, significant disparity found between blacks (50.3%) and whites (47.3%) as complainants. In reference to research question 1, a t-test was conducted to determine the mean between *UOF* and *years of service* for officers (UOF = 1) and "other complaints" (UOF = 0). The mean number of years of service for UOF complaints (UOF = 1) is M = 12.79 (SD = 8.2), and for other complaints (UOF = 0) is M = 12.93 (SD = 8.8). There is no significant difference in the mean years of service between "use of force" complains and other complaints.

The chi-square did not find any significant difference between the UOF and the independent variables; therefore, a binary logistic regression was conducted using $DV = (Use \ of Force \ Complaints)$ and IVs (*Other Complaints*) = Officer – Gender, Race and Years of Service and Complainant -Gender and Race. This model does not predict UOF significantly (chi-square= 14.95, df = 9, p =.095) because the p-value (p = .095) is not < .05. Therefore, the null hypothesis is accepted except use of force and gender of complainants, which is consistent with the outcome of crosstabs.

Model Summary			
		Cox & Snell R	Nagelkerke R
Step	-2 Log likelihood	Square	Square
1	937.089 ^a	.012	.023

According to the Negelkerke R-Squared, this entire model only accounts for 2.3% of the variance of UOF complaints. Individual coefficients (IVs) were not provided because the model is not significant. The logistic regression used three variables, resident/complainant sex (df = 1, sig. .002), officer sex (df = 1, .355) and officer years of service (df = 9, .126). DV coding .00 – 1.00.

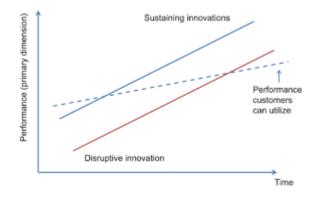
Hosmer and Lemeshow Test			
Step	chi-square	df	Sig.
1	7.268	8	.508

Summary of Findings

A chi-square analysis was conducted to answer the research questions and test the hypothesis to determine a relationship between UOF EIS variables and other EIS Other citizen complains. The dataset utilized was from a large Midwestern law enforcement agency in the U.S. The dependent variable was UOF, and the independent variables were UOF citizens' complaints (race and gender) and UOF violations (race, gender and years of service). With one exception, *H2.1*, there was no significant findings; therefore, the null hypotheses were accepted.

The following correlations were found: *H2.1* (Use of Force *x* Gender of Citizen Complainant) (x2 = 14.093, p= .000), *H1.1* (Use of Force x Gender of Violating Officer), (x2 = .7, p = 54), *H1.2* (Use of Force x race of Violating Officer) (x2 = .543, p=.909) *and H2.1* (Use of Force x Race of Citizen Complainant)(x2 = 1.148, p = .765). Consequently, there is no significant relationship found from comparing these variables with the exception of *H2.1*.

There is a relationship between 2x 2 contingency analysis and the multiple regression in one case. Both analyses found: 1) Chi-square proportion/percentage between males in the UOF category were (49%) and males in the other category were (45%). Multiple regression for UOF and gender/complainant was (df = 1, sig. .002). Further study of the data included beyond the established research questions would prove to be helpful. Addendum A contain the continuum variables. The lower end of the continuum begins with UOF -Verbal –Violation of Rights (30), the mid-point of the continuum is Aggressive Behavior and Language (7) and Excessive Physical Force 10).



The EIS data (use of force vs. gender citizen complaints) is the disruption.

The Sustaining Innovations is the training, mentorship and support services of young, inexperienced officers and support services. The EIS data for performance over time y, x.

This study showed no significant major main effect of the relationship between the UOF citizens' complaints, UOF violations, and using EIS data. However, the further examination of characteristics did show the males were more likely to be involved with the use of force incidents with police. The following chapter will provide interpretations of findings, recommendations, and limitations of the study. **Chapter 5: Recommendations and Implications**

Introduction

This study adds addresses the gap in UOF research by promoting further examination of explanatory EIS variables. In contrast to the acceptance of the null hypotheses, the process of developing the questions to probe the utility and effectiveness of early intervention data proved valuable information about UOF citizens' complaints (race and gender) and UOF violations (race, gender, and years of service) in conjunction with the additional variables listed in Appendix A. Increasing numbers of misconduct cases involving use of force are becoming more prevalent in the news, resulting in more protests and costing administrations high payouts demanding greater accountability of law enforcement.

This type of misconduct is sensationalized by the media and perpetuates public mistrust of law enforcement. Many agencies have paid costly pay-outs, and citizens and agencies alike have been irrevocably harmed. It is timely and imperative that the lack of quality data to research this issue is addressed. Data for this study were collected from one of the websites of police agencies that share data for researchers, agencies, and technologists to use for accountability and transparency. This study promotes agency data mining of EIS data as it holds a wealth of information that agencies can analyze exclusively to address their needs in broader terms that extend beyond existing EIS standards.

Recommendations

The primary focus of law enforcement agencies addresses UOF based on technology such as body-worn cameras, de-escalation training, and community policing. Scholars have made strides in this area, but there is still much to be learned; empirical research and collaboration with practitioners and community will suggest new approaches, "sine qua non of reform" (Benson, 2000, p.681) of agency administrators. Current researchers use more complex quantitative and qualitative studies to advance the development and standardization of explanatory variables (Klahm, Frank, & Brown, 2011). Research efforts must also be outcome and criteria based to establish new thresholds for performance outcomes and appropriate interventions. Walker and Archbold (2013) suggested that EIS implementation warrants greater attention from scholars and practitioners.

The use of basic primary questions as basic identifiable variables consistent with most agencies possesses significant value. Many agencies now examine more variables about the officers and citizens involved with the complaints as well as collect data from other sources such as administration, crime reports, and internal affairs. The dataset used for this study provided information that categorized as a continuum of offenses similar to the conceptual model of decision making of excessive UOF cases. This study provided a different approach to address this topic as it is necessary for evidence to drive public policy. UOF research must continue with quality data and an evolving understanding of this phenomenon (Hickman, Atherley, Lowery, & Alpert, 2015).

Applying a greater diversity of characteristics on a continuum model for UOF violations would create a less punitive organizational environment and a more supportive intervention process for officers identified via EIS at earlier stages in their careers. using ESI data to identify officers based on a continuum of force from minor offenses to severe crimes will identify any personal or situational issues meriting life coaching, mentorship, or counseling for intervention in lieu of disciplinary action. Capturing officers flagged for verbal or denial rights violations would support the officer, validate the complainant, and possibly prevent escalation of more severe offenses by the same officers.

The DIT frames the EIS data as a product; for example, public awareness and community policing are also elements of service recovery. Recovering, breaking patterns of misconduct, and sustaining compliance, requires collection of quality data and analyzation of data for resolution and predictability. Case studies, interviews, and surveys of officers' perceptions of misconduct would also add to the knowledge of UOF. The data are available; they have to be analyzed.

Most agencies gather primary data asked by the research questions in this study using these variables: UOF citizens' and officers' race, gender, and years on the force. Moreover, many agencies now collect the education levels and assigned precincts of officers. Agencies of all sizes possess a wealth of existing data useful for investigating variables to gain new knowledge regarding officers at risk or officers experiencing continued misconduct. EIS relies on straightforward thresholds rather than focus on datadriven strategies. This study supports the exploration of innovative approaches for police agencies to embrace data-driven plans for recruitment, training, intervention, and policy modification to reduce or prevent harm to officers and members of the community (see Helsby et al., 2018).

Focusing on UOF disruption innovations outcomes would allow risk managers to reduce harm and death of officers and civilians by improving operational and performance standards to de-escalate and minimize UOF police misconduct. Expanding, using, and integrating EIS data at the individual, citizen, and agency levels would influence human resources, job performance, operations, and policy. A growing number of agencies collect EIS data that captures officers' characteristics, citizens' characteristics, situational incidents, and geographic areas, as suggested by Jackson et al. (2016) and Chow (2017). Many agencies will now have to make collections to comply with government data requirements (Shane, 2018; White, 2016).

The literature review provided evidence of a lack of data to address UOF misconduct for the past decades and identified a need to continue to research police misconduct. Although there remains a need for agencies to collect and share quality data, according to White (2016), there is an abundance of existing available UOF data at many agencies. Most states do not have centralized data systems to house EIS data. Agencies possess the data or the capability of using the EIS to conduct systemic inquiries about the UOF misconduct by identifying relationships between a diverse group of variables.

Chi-square is appropriate to test null hypotheses and determine if there is a significance between variables. Further researchers may find that other variables such as education and personal issues (absenteeism, tardiness, substance abuse, and other factors) may have considerable significance in a relationship between study variables

(gender or race of officer and citizens) in UOF encounters. Each agency will face different challenges in establishing police misconduct study.

Change is difficult for bureaucratic systems with many stakeholders, however, law enforcement continuously pursues opportunities for professional growth, organizational development, and enhancement of community policing. Using an intelligence-based approach allows agencies of all sizes to begin researching EIS existing data to address their specific issues. Major paradigm shifts require time, training, and substantial financing. This approach is practical and cost-effective. In supportive of the DIT theoretical framework is applying the reductionism approach with implementing an extensive EIS data mining process.

A relationship between variables as examined in this study is an initial step, using the reductionism approach will identify causal interactions and processes (Dowe, 2009). The collection of data is essential to transforming the complex analyses into policies for contemporary policing (Jones, 2008).

Limitations of the Study

A significant limitation of the study was the scope of the research questions examining only the UOF citizen complaint (race and gender) violation variables (race, gender, and years of service). Initially, it was uncertain as to the type of data that would be available. In accessing the data, an abundance of information was available, and it allowed for a more interesting and valid investigation.

Another weakness of this study was the limitation of generalizability of using one a single agency for this study (see Menter & Flint, 1997). However, the DIT (continuum

of UOF model) can be customized to any agency, or other variables that can be used as well. The benefits of this model are that existing data or new indicators can be examined.

A mixed-methods study would allow for direct responses to be given by participants. In conjunction with the questions, the data were limited to the UOF sustained complaints, which was significantly smaller (less than 3%) when compared with other complaints. Future researchers focusing on officers who have been terminated due to misconduct using public documents, such as newspapers or case studies based on liability cost for agencies, would also give a perspective on this issue.

There are significant relevance and utility of this new knowledge in improving operations, enhancing cost reduction efforts, and supporting policy modification. The results of this study may serve as a foundation for further study that will promote the implementation of agency program evaluations, predictability studies, and racial intelligence training as it pertains to UOF encounters with citizens and police.

Disruptive Innovation Theoretical Framework

The data available for this study were extensive and categorized on a continuum ranging from verbal to excessive physical force. This model is consistent with the theoretical framework of using EIS data as the disruption and establishing sustainability levels by reducing or preventing misconduct of UOF events and maintaining those levels. Findings revealed that males make up the highest percentage of UOF citizen complaints. Other scholars have found that Black males are more likely than other groups to experience UOF events, primarily involving White male officers (Chaney & Robertson, 2015; Fyfe, 2010; Lee, 2004). Using EIS data, these rates can be examined with further

research of officer and victim characteristics that expand the basic generalizations of police misconduct to more scientific inquiries.

As a founder and director of a not-for-profit organization that addresses the issue of Black males and police encounters, the streetball basketball team played seven local police departments. With one department, in particular, the game was played with extreme physicality and emotion, breaking stereotypes and barriers. Later, relationships developed, and two officers joined the streetball team. It was through the engagement and interaction when both officers and youth gained greater knowledge and insight into each other. There are cultural and socioeconomic factors that play a role in mutual mistrust that could lead to avoidable excessive UOF encounters. More attention to the habits and job performance of the good apples (which were the missing data of positive encounters and recognitions) may also add to the prevention or prediction of UOF.

Further exploration and study of cultural differences, community outreach initiatives, and racial and intelligence training pertaining to misconduct could make a positive social change. Using a continuum of complaints would add knowledge to better understanding the relationship between race, gender, and age of the UOF violating officers and use of force citizens' complainants.

This study recommends expansion of EIS data to increase its functionality and effectiveness of this system by improving data collection practices and increasing and refining identifiers. Initially, this approach may increase the number of officers identified for less serious incidents. Focusing on training and support of the officer with expanded support services or mentorship buddy systems with enhanced interventions for performance rather than punitive measures for appropriate cases is possible.

Agencies that are data-driven and intelligence-based are more transparent, accountable, and proactive in critical incidents. Program evaluations, internal affairs, community policing, and EIS data are parts of a complex organization. The more efforts to improve data integration and effective communication will serve all stakeholders. EIS data mining provides a potential wealth of information. Apart from the limitations of data and research questions, this study is an opening to view the UOF misconduct through the lens of disruptive innovation with the capability of using EIS data to establish new protocols.

Conclusion

Many variables impact formulating a consensual decision on UOF from administrative, cultural, situational, philosophical, and various interpretations of the law. UOF will continue to be a complex and debated issue among segments of society. The study of UOF is relevant; it holds life and death. This study provided value in confirming that there are many scholars do not know, and scholars who do learn that law enforcement benefit from a respond proactively and with accountability when these incidents occur. Administrators must practice risk management and become more proficient in using available data in problem-solving.

The continuum model identified with this study can be developed with further research and using DIT and potentially help bridge the gap between the police and the community. New protocols could reduce payouts (taxpayer dollars) for civil cases and lower criminal cases against law enforcement officers. It could save the lives of unarmed members of the community who are killed by officers, save the lives of officers, and improve relations between police and the community.

References

- Abramowitz, A., & McCoy, J. (2019). United States: Racial resentment, negative partnership, and polarization in Trump's America. *The ANNALS of the American Academy of Political and Social Science*, 681(1), 137-156. doi.org/10.1177/0002716218811309.
- Adams, K. (1996) Measuring the prevalence of police abuse of force. *Police Violence*: Understanding and Controlling Police Abuse of Force, New Haven & London: Yale University Press, 52-93.
- Adams, S. (2018).(Thesis). Framing effects in competitive environment: Black hues matter versus President Trump. (Honor's Thesis) Student Research. University of Tennessee at Chattanooga. https://scholar.utc.edu/honors-thesis.
- Akers, R. (2017). Social learning and social structure: A general theory of crime and deviance. New York, NY: Routledge.
- Alpert, G. P., & Walker, S. (2000). Police accountability and early warning systems:
 Developing policies and programs. *Justice Research and Policy*, 2 (2), 59-72.
 doi.ezp.waldenlibrary.org/10.3818/JRP.2.2.200.59
- Andersen, J. P., & Papazoglou, K. (2014). Friends under fire: Cross-cultural relationships and trauma exposure among police officers. *Traumatology*, 20 (3), 182. doi.ezp.waldenlibrary.org/10.1037/h00999403.
- Ariel, B., Farrar, W. A., & Sutherland, A. (2015). The effect of police body-worn cameras on use of force and citizens' complaints against the police: A randomized

controlled trial. *Journal of Quantitative Criminology*, *31*(3), 509-535. doi: 10.1007/s10940-014-9236-3.

Armacost, B. E. (2003). Organizational culture and police misconduct. *George Washington Law Review*, 72, 453.

Babbie, E. (2017). *The basics of social research*. Boston: MA. Cengage Learning.

- Bazley, T. D., Mieczkowski, T., & Lersch, K. M. (2009). Early intervention program criteria: Evaluating officer use of force. *Justice Quarterly*, 26 (1), 107-124. doi:10.1080/07418820861989742
- Benson, R. W. (2000). Changing police culture: The sine qua non of reform. Loyola of Los Angeles Law Review. 34, 535, 547-550,681.
- Blanks, J. (2015). Commission on civil rights, briefing on police practices, and use of force. City, State: CATO Institute.
- Bolton, K. & Feagin, K. (2004). Black in blue. African American police officers and racism. New York, NY Routledge.
- Boutwell, J. P. (1977). Use of deadly force to arrest a fleeing felon-A constitutional challenge. *Federal Bureau of Investigation Law Enforcement Bulletin.* 46, 27.
- Bradford, B., Jackson, J., & Hough, M. (2013). Police futures and legitimacy: Redefining 'good policing'. In *The future of policing* (pp. 109-130). New York, NY: Routledge.
- Brandt, B., & Barton, A. J. (2018). Interprofessional education in the age of risk and innovation. *Journal of Nursing Education*, *57* (11), 635-637.

Brandl, S. G., Stroshine, M. S., & Frank, J. (2001) Who are the complaint-prone officers?
An examination of the relationship between police officers' attributes, arrest activity, assignment, and citizens' complaints about excessive force. *Journal of Criminal Justice*, 29(6) 521-529. doi:10.1016/50047.

Buehler, James, W., M.D. (2016) Racial/ethnic disparities in the use of lethal force by US police, 2120-2014. American Journal of Public Health. <u>https://ajph.aphapublications.DOI:/full/10.2105/AJPH.2016.303575.</u>

- CALEA. (2019). Commission on Accreditation for Law Enforcement & Agencies. www.calea.org/
- Callanan, V. J. & Rosenberger, J.S. (2011). Media and public perceptions of the police:
 Examining the impact of race and personal experience. *Policing & Society*, 2 (2), 167-189. (01) 00114-3. DOI:10.1080/10439463.2010.540655.
- Camilli, G. & Hopkins, K. D. (1978). Applicability of chi-square to 2 x 2 contingency tables with small expected cell frequencies. *Psychological Bulletin*, 85 (1), 163. doi: http://dx.doi.org.ezp.waldenulibrary.org/10.1037/0033-2909.85.1.163.
- Campbell, B. A., Nix, J., & Maguire, E. R. (2018). Is the number of citizens fatally shot by police increasing in the post-Ferguson era? *Crime & Delinquency*,64 (3), 398-420. http:/dx.doi.org/10.1037/0033-2909.85.1.163
- Chaney, C. & Robertson, R. V. (2015). Armed and dangerous? An examination of fatal shootings of unarmed black people by police. *Journal of Pan African Studies*, 8 (4), 45-78. Retrieved from https://search-ebscohost-

com.ezp.waldenulibrary.org/login.aspx?direct=true&db=a9h&AN=110730124&s ite=ehost-live&scope=site.

Chapman, C. (2009). Examining relationship between police education and perspectives on use of force in minority communities. (order No. 3351829). *Criminal Justice Database*. (305166868). Retrieved from

 $\underline{https://ezp.waldenulibrary.org/login?url=https://search-proquest-production/content/search-p$

com.ezp.waldenulibrary.org/docview/305166868?

- Chermak, S., McGarrell, E. & Gruenewald, J. (2006). Media coverage of police misconduct and attitudes toward police. An International Journal of Police Strategies & Management. Vol. 29, 2, 261-281 doiorg.ezp.waldenulibrary.org/10.1108/13639510610667664.
- Christensen, C.M. (2006). The ongoing process of building a theory of disruption. Journal of Product Innovation Management. 23 (1), 39-55.
- Christensen, C.M., Raynor, M.E. & McDonald, R. (2015). What is disruption innovation? *Harvard Business Review*. Retrieved from https://doi.org/10.1111/j.1540-5885.2005.00180.x.
- Ciasullo, M., Cosimato, S., & Pellicano, M. (2017). Service innovations in the healthcare service ecosystem: a case study. *Systems*, 5 (2), 37. https://doi.org.3390/systems5020037.
- Cohen, P., West, S.G. & Aiken, L. S. (2014). *Applied multiple regression/correlation* analysis for the behavioral sciences.

Cole, G. F., Smith, C. E., & DeJong, C. (2018). *The American system of criminal justice*. Cengage Learning.

COPS (2006). U.S. Dept. of Justice. Office of Community Oriented Policing Services

- Cortez, Nathan. (2014). Regulating disruptive innovation. *Berkeley Technology Law Journal*. Vol. 29, Issue 1
- Creswell, J. (2009) *Research design: Qualitative, Quantitative and Mixed Methods Approaches.* Thousand Oaks, CA: Sage Publications.

Cubitt, T. I., Lesic, R., Myers, G. L., & Corry, R. (2017). Body-worn video: A systematic review of literature. *Australian & New Zealand Journal of Criminology*.*50* (3), 379-396. doi-org.ezp.waldenulibrary.org/10.1177/0004865816638909 .

Data, (2018) U.S. ww.datausa.com

Davis, C.N., Rivera-Sanchez, M. & Chamberlin, B.F. (1996) Sunshine laws and judicial discretion: A proposal for reform of state sunshine law enforcement provisions. *Urban. Lawyer*, 28, 41. American Bar Association, ttps://www.jstor.org/stable/27894988.

- Davis, P. L. (1994). Rodney King and the Decriminalization of Police Brutality in America: Direct and Judicial Access to the Grand Jury as Remedies for Victims of Police Brutality When the Prosecutor Declines to Prosecute. *Maryland. Law. Reviews*, 53, 271.
- Dillard, C.E. (2018). Embedding racial and gender diversity in state-mandated common assessments.(Dissertation). A Policy Advocacy Document. National Louis University.

- Doherty, O. (2017). Reform to police department hiring: Preventing the tragedy of police misconduct. *Case Western Reserve Law Reserve Law Review*. 68 (4), 1259-1302.
- Dollar, C. B. (2014). Racial threat theory: Assessing the evidence, requesting redesign. *Journal of Criminology*, 2014. Retrieved from http://dx.doi.org/10.1155/2014/983026.
- Dombrowski, P. & Gholz, E. (2009). Identifying disruptive innovation: Innovation theory and the defense industry. *Innovations: Technology, Governance, Globalization*, *4*(2), 101-117. 4 (2), 101-117.
- Dowe, P. (2009). Casual process theories. *The Oxford handbook of causation*. doi:10.1093/oxfordhb/978019927979739.003.0011.
- Dunhan, R. G. & Alpert, G. P. (2015). *Critical issues in policing: Contemporary readings*. Long Grove IL: Waveland Press Publishing.
- Eitle, D., D'Alessio, S. J., & Stolzenberg, L. (2014). The effect of organizational and environmental factors on police misconduct. *Police Quarterly*, *17* (2), 103-126https://doi-org.ezp.waldenulibrary.org/10.1177%2F1098611114522042.
- Elinson, Z., & Frosch, D. (2015). Cost of police-misconduct cases soars in big U. S. The Wall Street Journal. July 15. cities. http://www.wsj.com/articles/cost-of-policemisconduct-cases-soars-on-big-US_cities-1437013834.
- Flavin, M. (2012). Disruptive technologies in higher education. *Research in Learning Technology*, 20, https://doi.org/10.3402/rlt.v20i0.19184.

- Finck, J. G. (2018). Can NFL players be punished for kneeling An analysis of the banter surrounding the star-spangled banner. University of Denver Sports & Entertainment Law Journal, 21, 125.
- Fryer, Roland, Jr. G. (2016) An empirical analysis of racial differences in police use of force. National Bureau of Economic Research. NBER Working Paper Series. Retrieved from http://www.nber.org/apers/w22399.
- Furst, R. & Webster, M. (2018). Minnesota cities, counties paid \$60.8M in police misconduct claims in past decade. *Star Tribune*, Retrieved from http://www.startribune.com/minnesota-cities-counties-paid-60-8m-in-policemisconduct-claims-in-past-decade/479781413/?refresh=true.
- Gandi, A. G., Murphy-Graham, E., Petrosino, A., Chrismer, S. G. & Weiss, C. H. (2007).
 The devil is in the details: Examining the evidence for "proven school-based drug abuse prevention programs. *Evaluation Review*. 31 (1), 43-74.
 doi: 10.1177/0103841X06287188

doi.10.1177/0193841X06287188.

- Girod, R. J. (2013). Police Liability and Risk Management: Torts, Civil Rights, and Employment Law. Boca Raton, FL: CRC Press, Taylor & Francis Group.
- Gustafson, J. L. (2008). Tokenism in policing: An empirical test of Kanter's hypothesis. Journal of Criminal Justice, 36(1), 1-10 https://doiorg.ezp.waldenulibrary.org/10.1016/j.jcrimjus.2007.12.001.

Harris, C. (2014). The onset of police misconduct. *Policing: An International Journal of Police Strategies & Management*, 37(2), 285-304, https://doi-org.ezp.waldenulibrary.org/10.1108/PIJPSM-01-2012-0043.

- Harris, C. J. (2016). Towards a career view of police misconduct. Aggression and violent behavior, 31, 219-228, https://doiorg.ezp.waldenulibrary.org/10.1016/j.avb.2016.10.001.
- Harris, C. J., & Worden, R. E. (2014). The effect of sanctions on police misconduct. *Crime & Delinquency*, *60*(8), 1258-1288, doi: 10.1177/0011128712466933.
- Hassell, K. D. (2016). 13 Reducing police misconduct. *Stress in Policing: Sources, consequences and interventions*, London: Routledge, 220.
- Helsby, J., Canton, S., Joseph, K., Mahmud, A., Park, Y., Navarrette, A., Ackerman, k., Walsh, J., Haynes, L., Cody, C., Patterson, E., Ghani, R. (2017). Early intervention systems: Predicting adverse interactions between police and the public. *Criminal Justice Policy Review*. 29, 2, 190-209. https://doiorg.ezp.waldenlibrary.org/10.117708874034176951380.
- Hickman, M.J. Atherley, L.T., Lowery, P.G. & Alpert, G.P. (2015). Reliability of the force factor method in police use of force research. *Police Quarterly*, 18 (4), 368-396, doi: 10.1177/1098611115586175.
- Hickman, M. J. (2006). *Citizen complaints about police use of force*. Washington, DC:
 US Department of Justice, Office of Justice Programs, Bureau of Justice
 Statistics, https://www.ncjrs.gov/tutorial/obtain.html.
- Holmes, M. D. (2017). Police brutality. *In the Cambridge handbook of social problems*. Cambridge University Press, New York, N.Y.

- Hughey, M.W. (2015). The five I's of five O: Racial ideologies, institutions, interests, identities, and interactions of police violence. *Critical Sociology*. 41 (6), 857-871. doi: 117710896920515589724.
- Intravia, J., Piquero, A. R., & Piquero, N. L. (2018). The racial divide surrounding United
 States of America national anthem protests in the National Football League.
 Deviant Behavior, 39 (8), 1058-1068. doi: 10.1080/01639625.2017.1399745.
- Ivković, S. K. (2009). Rotten apples, rotten branches, and rotten orchards: A cautionary tale of police misconduct. *Criminology & Public Policy*, 8 (4), 777-785. doi.org/10.1111/j.1745-9133.2009.00593.x
- Jackson, B. Towe, V. L., Wagner, L. Hunt, P., Greathouse, S. & Hollywood, J. S. (2017).
 Managing officer behavioral risk using early intervention systems: Addressing system design challenges for law enforcement and corrections environments. *Policing: A Journal of Policy and Practice*. Vol. 11, 103-117.
 https://doi.org/10.1093/police/paw028.
- Johnson, B. (2001). Toward a new classification of nonexperimental quantitative research. *Educational Researcher*, 0 (2), 3-13.DOI:

10.310210013189X030002003.

- Johnson, Jr. M. (2013). Examining united states arm subordinates perceptions of managers' emotional intelligence perceptions of organizational commitment.
 Northcentral University.
- Jones, M. (2008). A complexity science view of modern police administration. *Public Administration Quarterly*, 433-457. http://www.jstor.org/stable/4/288325.

- Kane, R. J. (2002). The social ecology of police misconduct. *Criminology*, 40 (4), 867-896. Retrieved from https://ezp.waldenulibrary.org/login?qurl=https%3A%2F%2Fsearch.proquest.com%2Fdocview%2F220714134%3Facc.
- Kane, R. & White, M. (2009). Bad cops: A study of career-ending misconduct among New York City police officers. *Criminology & Public Policy*. 8(4),737-769. DOI: 10.1111/j.1745-9133.2009.00591. x.
- Kappeler, V. E. (2006). *Critical issues in police civil liability*. Long Grove, IL: Waveland Press.
- Kennison, P. C. (2002). Policing Diversity—Managing Complaints Against the Police. *The Police Journal*, 75 (2), 117-135. DOI: 10.1177/0032258X0207500205.
- King, A. A., & Baatartogtokh, B. (2015). How useful is the theory of disruptive innovation? *MIT Sloan Management Review*, *57*(1), 77.
- Klahm,F. IV, C., Frank, J., & Liederbach, J. (2014). Understanding police use of force: Rethinking the link between conceptualization and measurement. *Policing: An International Journal of Police Strategies & Management*, 37 (3), 558-578, doi.org/10.1108/PIJPSM-08-2013-0079.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. Daryagani, New Delhi: New Age International (P) Limited Publishers.
- Krimmel, J., Kochis, D., Lindenmuth, P., & Morreale, P. (2004). *The Pennsylvania Police Accreditation Evaluation.*

Lawton, B. A., Piquero, A. R., Hickman, M. J., & Greene, J. R. (2001). Using GIS to analyze complaints against police: A research note. *Justice Research and Policy*, 3(2), 95-108, https://doi-org.ezp.waldenulibrary.org/10.3818%2FJRP.3.2.2001.95

Lee, C. (2004). But I thought he had a gun. race and police. use of deadly force. Hastings Race & Policing, Law Journal, 2, 1,

https://repository.uchastings.edu/hastings_race_poverty_law_journal/vol2/iss1/1.

Lecture Notes (2018) www-

bcf.usc.edu/~mmclaugh/550x/PPTslides/WeekTwoSlides/Lecture

- Leinfelt, F. H. (2005). Predicting use of non-lethal force in a mid-size police department: A longitudinal analysis of the influence of subject and situational variables. *The Police Journal*, 78 (4), 285-300, doi 10.1350/pojo.2005.78.4.285.
- Lersch, M., Bazley, T. & Mieczkowski, T. (2006). Early intervention programs: an effective police accountability tool, or punishment of the productive? *Policing: An International Journal of Police Strategies & Management*, 29 (1), 58-76, doi:10.1108/13639510610648485.
- Lersch, K. M. (2002). Are citizen complaints just another measure of officer productivity? An analysis of citizen complaints and officer activity measures. *Police Practice and Research*, 3 (2), 135-147, https://doiorg.ezp.waldenulibrary.org/10.1080/15614260290033639.
- Levenson, L. L. (1993). The Future of State and Federal Civil Rights Prosecutions: The Lessons of the Rodney King Trial. *UCLA L. Rev.*, *41*, 509.

Lin, C., B., & Yenchun, J. W. (2018). Existing knowledge assets and disruptive innovation: The role of knowledge embeddedness and specificity. *Sustainability*, 10(2), 342. doi: http://dx.doi.org.ezp.waldenulibrary.org/10.3390/su10020342.

Lindley, Don E. (2014). Control balance theory and adverse citizen-police interactions: A phenomenological study. (Order No. 3621618). *Criminal Justice Database*.
91545888055). Retrieved from https://ezp.waldenulibrary.org/login?url=https://search-proquest-

comezp.waldenulibrary.org/docview/1545888055?accountid=14872.

- Livingston, D. (1999). Police reform and the department of justice: An essay on accountability. *Buffalo Criminal Law Review*, 2(2), 817-859. DOI: 10.1525/nclr.1999.2.2.817.
- Lonsway, K. (2001). Policewomen and the use of force. *Law & Order*, 49 (7), 109-114, Retrieved from

https://ezp.waldenulibrary.org/login?qurl=https%3A%2F%2Fsearch.proquest.co m%2Fdocview%2F197216860%3Facco.

- Lonsway, K., Sillar, K., Tejani, S., Aguirre, P., Dupes, H., Moore, M. Harrington, C.P. & Smeal, E. (2003). Tearing down the wall: Problems with consistency, validity, and adverse impact of physical agility testing in police selection. *National Center for Women Policing*, https://doi.org/10.1177%2F1098611103254314.
- Macintyre, S., Prenzler, T. & Chapman, J. (2008) Early intervention to reduce complaints: An Australian Victoria police initiative. *International Journal of*

Police Science & Management, 10 (2), 238-250,

https://doi.org/10.1350/ijps.2008.10.2.77.

- Maguire, M. (2000). Policing by risks and targets: Some dimensions and implications of intelligence-led crime control. *Policing and Society: An International Journal*, 9 (4), 315-336. DOI: 10.10801043946320009964821.
- Maguire, E. R., Nix, J., & Campbell, B. A. (2017). A war on cops? The effects of Ferguson on the number of US police officers murdered in the line of duty. *Justice Quarterly*, *34* (5), 739-758, https://doi-org.ezp.waldenulibrary.org/10.1080/07418825.2016.1236205.
- Maguire. E.R. & Uchida, C.D. (2000). Measurement and explanation in the comparative study of American police organizations. *Criminal Justice*, 4, 491-557.
- Manning, P. K. (2005). The study of policing. *Police Quarterly*, 8 (1), 23-43.doi: 10.1177/109861110426735
- Martin, S.E. & Jurik, N.C. (2006). *Doing justice, doing gender: Women in legal and criminal justice occupations.* Thousand Oaks: Sage.
- McKeown, M.C. (2018). Police misconduct: Ineffective police department complaintsreview procedures and the propositions of corrective federal oversight. *Suffolk University Law Review*. 51 (2). 309-330.
- Mears, T. L., Tyler, T. R., & Gardener, J. (2015). Lawful or Fair-How Cops and Laypeople Perceive Good Policing. J. Crim. L. & Criminology, 105, 297, 0091-4169/15/10502-0297.

- Menter, J. T. & Flint, D.J. (1997). Validity in logistics research. *Journal of Business Logistics*, 18 (1), 199, Retrieved from https://search-ebscohostcom.ezp.waldenulibrary.org/login.aspx?direct=true=&=bth&AN=97102284086& site=ehost-live&scope=site.
- Mint Press News Desk. (July 21, 2015). https://www.mintpressnews.com/policemisconduct-cost-taxpayers-over-lb-since-2010/2077651.
- Mogin, P. (1980). The Policeman's Privilege to Shoot a Fleeing Suspect: Constitutional Limits on the Use of Deadly Force. *American Criminal Law Review*, *18*, 533.
- Moore, M. H. & Braga, A.A. (2003). Measuring and improving police performance: The lessons of Compstat and its progeny. *Policing: An International Journal of Police Strategies & Management*, 26 (3), 439-453, https://doi.org/10.1108/13639510310489485.

Mollett, S. (2017). Celebrating critical geographies of Latin America: Inspired by an NFL Quarterback. *Journal of Latin American Geography*, 16(1), 165-171, doi:1 0.1353/lag.2017.0010.

Morash, M. & Haar, R.N. (1995). Gender, workplace problems and stress in policing. *Justice Quarterly*. 12 (1), 113-140. DOI: 10.1080/0741882950000

Nascimento, I. (2017). Hands up, Don't Shoot: The Use of Deadly Force by Police against Racial Minorities in the United States. U.C. Davis Journal of International Law & Policy, 24, 63.

Neily, Clark (2018). *Make cops carry liability insurances: The private sector knows how to spread risks and costs.* CATO Institute.

- Nicholson-Crotty, S., Nicholson-Crotty, J. & Fernandez, S. (2017). Will more black cops matter? Officer race and police-involved homicides of black citizens. *Public Administration Review*, 77. (2), 206-216, doi: 10.1111/puar.12734.
- Novak, K. J. (2004). Disparity and racial profiling in traffic enforcement *Police Quarterly*, 7 (1), 65-96. DOI: 10.1177/10986111022250359.
- Novak, K. J., Smith, B. W., & Frank, J. (2003). Strange bedfellows: Civil liability and aggressive policing. *Policing: An international journal of police strategies & management*, 26 (2), doi:10.1108/13639510310475813.
- Olsson, J. (2018). Kneeling Heroes, Standing Heroes: the role of identity discourses in the national anthem controversy. Retrieved from http://lup.lub.lu.se/student-papers/record/8942644.
- PDI (2019) Police Initiative Data, www.policeinitiative.org
- Paoli Paoline, E.A. & Terrill, W. (2005). Women police officers and the use of coercion. Women & Criminal Justice, 15 (3-4) 97-119,

https://doi.org/10.1300/J012v15n03_05.

Paoline, E.A. & Terrill, W. (2007). Police education, experience and the use of force. *Criminal justice and behavior*, 34(2) 179-196. https://doi.org/10.1177/0093854806290239

Pickett, J. T., Mancini, C., Mears, D. P., & Gertz, M. (2015). Public (mis) understanding of crime policy: The effects of criminal justice experience and media reliance. *Criminal Justice Policy Review*, 26 (5), 500-522, https://doi.org/10.1177%2F0887403414526228 Porter, L. E., & Warrender, C. (2009). A multivariate model of police deviance:
examining the nature of corruption, crime and misconduct. *Policing & Society*, *19* (1), 79-99. DOI: 10.1080/10439460802457719.

Preacher, K. J. (2001). Calculation for the Chi-square test. An interactive calculation tool for chi-square tests of goodness of fit and independence. Ohio State University: http://quantrm2. psy. ohio-state. edu/kris/chisq/chisq. Retrieved from http://quantpsy.org/.

- Punch, M. (2010). Police corruption: Deviance, accountability, and reform in policing. *Policing: A Journal of Policy and Practice*, 4 (4), 315-321. https://doi.org/10.1093/police/paq053.
- Rabe-Hemp, C. (2017). Thriving in an all-boys club. Female police and their fight for equality. Lanham, MD: Rowman & Littlefield.
- Reisig, M. D., & Kane, R. J. (Eds.). (2014). The Oxford handbook of police and policing. New York, NY: Oxford University Press.
- Rogge, N., & Verschelde, M. (2013). A composite index of citizen satisfaction with local police services. *Policing: An International Journal of Police Strategies & Management*, 36 (2), 238-262. doi: 10.1108/1363951131132.
- Rojek, J., Alpert, G. P., & Smith, H. P. (2012). Examining officer and citizen accounts of police use-of-force incidents. *Crime & delinquency*, 58 (2), 301-327. https://doi.org/10.1177%2F0011128710386206.
- Rosenbaum, D. P. (2007). Just say no to DARE. *Criminology & Public Policy*,6 (4), 815-824.DOI: 10.1111/j.1745-9133.2007. 00474.x

Rumrill, Jr. P. D. (2004). Non-manipulation quantitative designs. Work, 22 (3), 255-260.

Rushin, S. (2014). (Dissertation) Structure reform litigation in American police departments. *Minnesota Law Review*, 99, 1343.

Schimmel, K.S. (2017). Not an "Extraordinary event:" NFL games and militarized civic ritual 1. Sociology of Sport Journal, 34 (1), 79-89, https://doi.org/10.1123/ssj.2016-0172.

- Schuck, A. M. & Rabe-Hemp, C. (2007) Women police: The use of force by and against female offices. Women & Criminal Justice, 16(4), 91-117, https://doiorg.ezp.waldenulibrary.org/10.1300/J012v16n04_05.
- Schuck, A. M., & Rabe-Hemp, C. (2016). Citizen complaints and gender diversity in police organizations. *Policing and Society*, 26(8), 859-874, https://wwwtandfonline-

com.ezp.waldenulibrary.org/doi/citedby/10.1080/10439463.2014.989161?scroll=t op&needAccess=true.

- Schultz, P. (2011). Personnel early warning systems for small law enforcement agencies. *Meeting of the International Association of Chiefs of Police*, Chicago, IL. Retrieved from http://theiacp. org/Portals/0/pdfs/Implementing_Early_Warning_Handout. pdf.
- Schwartz, J. C. (2014). Police indemnification. New York University Law Review, 89, 885, https://escholarship.org/uc/item/8t1934f6.

Schwartz, J. C. (2016). How Governments Pay: Lawsuits, Budgets, and Police Reform. University of California Los Angeles Law Review, 63, 1144, Retrieved from http://search-ebscohostcom.ezp.waldenulibrary.org/login.aspx?direct=true&db=a9h&AN=116431231&s ite=ehost-live&scope=site.

- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Sessions, J. (2017). Memorandum Supporting Federal, State, Local and Tribal Law. https://www.justice.gov/opa/pr/attorney-general-sessions-memorandumsupporting-federal-state-local-and-tribal-law
- Sherman, L.J. (1975). An evaluation of policewomen on patrol in a suburban police department. *Journal of Police Science & Administration*. 3(4), 434-438.
- Shjarback, J. A. (2015). "Emerging early intervention systems: An agency-specific prepost comparison of formal citizen complaints of use of force." *Policing: A Journal of Policy and Practice*, 9.4, 314-325. doi:10.1093/police/pav006.
- Shultz, A. (2015). Early Warning Systems: What's New? What's Working? Center for Naval Analyses. Arlington, VA.
- Skolnick, J.H. (2011) *Justice without trial: Law enforcement in democratic society*. Quid Pro Books.
- Simmons, K.C. (2009). New governance and the new paradigm of police accountability: A democratic approach to police reform. *Catholic University Law Review*. 59, 373,

http://scholarship.law.edu/lawreview/vol59/iss2/3?utm_source=scholarship.law.e

Smith, A., Ayanian, J., Covinsky, K., Landon, B., McCarthy, E., Wee, C. & Steinman,M. (2011). Conducting high-value secondary dataset analysis: An introductory

guide and resources. *General Internal Medicine*. 26(8), 920-929. doi:hhtps://doi.org/10.1007/s/11606-010.

- Smith, B. W. & Holmes, M. D. (2014). Police use of excessive force in minority communities: A test of the minority threat, place, and community accountability hypotheses. *Social Problems*, 61(1), 83-104. doi:/10.1525/sp.2013.12056.
- Star Tribune (2015). Library112.Justice Department releases report on PD "early intervention system". Retrieved from www.startribune.com/justice-department-release-report-on-mpd-early-intervention-system/290149921/
- Steinman, M. (2011). Conducting high-value secondary dataset analysis: An introductory guide and resources. General Internal Medicine. 26(8), 920-929, doi:https://doi/org/10.1007/s11606-010-.
- Stinson, Sr. P. M. (2009). Police crime: A newsmaking criminology study of sworn law enforcement officers arrested, 2005-2007.
- Stinson Sr, P. M., Brewer Jr, S. L., Mathna, B. E., Liederbach, J., & Englebrecht, C. M. (2015). Police sexual misconduct: Arrested officers and their victims. *Victims & Offenders*, 10 (2), 117-151.
- Stroshine, M.S. & Brandl, S.G. (2012) Race, gender and tokenism in policing: An empirical elaboration. *Police Quarterly*, 14 (4), 344-365. https://doiorg.ezp.waldenulibrary.org/10.1177%2F1098611111423738.
- Sweet, S. A. & Grace-Martin, K. (1999). *Data analysis with SPSS* (Vol. 1). Boston, MA: Allyn & Bacon.

Terrill, W., & Ingram, J. R. (2016). Citizen complaints against the police: An eight-city examination. *Police Quarterly*, *19* (2), 150-179, doi:

10.1177/1098611115613320.

- Terrill,W. &Mastrofski, S.D. (2002). "Situational and officer-based determinants of police coercion." Justice Quarterly, 19, 2, doi:10.1080/07418820200095221.
- The Buffalo News (2014) buffalonews.com/2014/12/12/videotaped-cop-was-sued-3times-forexcessive-force/

The Guardian. https://www.theguardian.com/us-news/2015/may/08/san-francisco.

The Washington Post, Aug.5, 2016. White cop convicted of manslaughter unarmed black man outside VA Walmart. Retrieved from https://www.washingtonpost.com/news/morning-mix/wp/2016/08/05/white-copconvicted-of-manslaughter-for-shooting-unarmed-black-man-outside-vawalmart/?utm_term=.abb4dbc8cc2e

- Tidd, J., Bessant, J., & Pavitt, K. (2005). *Managing innovation integrating technological, market and organizational change*. John Wiley and Sons Ltd.
- Thompson, B., Diamond, K. E., McWilliam, R., Snyder, P. & Snyder, S. W. (2005). Evaluating the quality of evidence from correlated research for evidence-based practice. *Exceptional Children*, 71(2), 181-194. https://doi/10.310/0013189X030003003
- Toro-Vizcarrondo, C. & Wallace, T. D. (1968). A test of the mean square error criterion for restrictions in linear regression. *Journal of the American Statistical Association*, 63, (322), 558-572.

- U.S. Department of Justice. Research in Brief. National Institute of Justice. *Early Warning System: Responding to the Problem Police Officer*. July 2001.
- U.S. Department of Justice (2018). https://www.justice.gov/file/1028756/download.
- U.S. Department of Justice. (2006) COPS. Office of Community Oriented Policing.
- Van Brunt, A. A., Bedi, S. A., Bowman, L. E., & Futterman, C. B. (2016). Complaint Submitted to the United States Department of Justice Documenting the Role of the Independent Police Review Authority in Perpetuating a Code of Silence and Culture of Violence in the Chicago Police Department.
- Vaughn, M.S., Cooper, T.W. & del Carmen, R.V. (2001) Assessing legal liabilities in law enforcement: Policies chiefs' views. NCCD News, 47 (1), 3-27.
- Walker, S. (2003). The New Paradigm of Police Accountability: The US JusticeDepartment Pattern or Practice Suits in Context. *Louis University. Public LawReview*, 22, 3.
- Walker, S. (2012). Institutionalizing police accountability reforms: The problem of making police reforms endure. *Louis University Public Law Review*, 32, 57.
- Walker, S. (2015). Introduction to early intervention systems. *Critical Issues in Policing Contemporary Readings*, 244.
- Walker, S. E., & Archbold, C. A. (2018). *The new world of police accountability*.Thousand Oaks, CA: Sage Publications.
- Walker, S., Alpert, G. P., & Kenney, D. J. (2000). Early warning systems for police: Concept, history, and issues. *Police Quarterly*, *3* (2), 132-152. doi:10.1177/1098611100003002001

- Walker, S., Alpert, G.P. & Kenney, D.J. (2001). Early warning systems: *Responding to the problem police officer*. Washington, DC: US Department of Justice, Office of Justice Programs, National Institute of Justice.
- Walker, S.E. & Archbold, C.A. (2013). *The new world of police accountability*. Sage Publications.
- Walker, S., Milligan, S.O. & Berke, A. (2006). "Supervision and intervention within early intervention systems: A guide for law enforcement Chief executives."*Police Executive Research Forum.*
- Walker, S., Milligan, S. O., & Berke, A. (2006). Strategies for intervening with officers through early intervention systems: A guide for front-line supervisors. US
 Department of Justice, Office of Community Oriented Policing Services.
- Washington Post (2018). Democracy Dies in Darkness. Retrieved from https://www/washingtonpost.com/national/trump-adiministration-opposeschicago-police-reformplan/adoa-0e0lefba3ccl_story.html.
- Washington Post (2015). <u>www.washingtonpost.com/national/fbi-director-calls-lack-of-</u> <u>data-on-police-shootings-ridiculous-embrassing/2015/10/07/cDebgf7a-6d16-</u> <u>11e5631c-d80d62653e28-story.html?utm.term+.7d5ce92e7af0</u>.
- Warner, R. M. (2013). Applied statistics: From bivariate through multivariate techniques. Thousand Oaks, CA: Sage.
- White, P. (2017). *Developing research questions*. Macmillan International Higher Education.

Willis, J. J., Mastrofski, S. D., & Weisburd, D. (2007). Making sense of COMPSTAT: A theory-based analysis of organizational change in three police departments. *Law* & *Society Review*, *41*(1), 147-188. https://doi.org/10.1111/j.1540-5893.2007.00294.x.

Wolfe, S. E., & Piquero, A. R. (2011). Organizational justice and police misconduct. *Criminal Justice and Behavior*, 38 (4), 332-353. doi: 10.1177/0093854810397739.

- Worden, K. E. (2015). The 'causes' of police brutality: Theory and evidence on police use of force. ER Maguire & DE Duffee, Criminal Justice Theory: Explaining the Nature and Behavioral of Criminal Justice 2, 149-204.
- Worden, R., Harris, C., & J. McLean, S. (2014). Risk assessment and risk management in policing. *Policing: An International Journal of Police Strategies & Management*, 37(2), 239-258.doi:1177/009385481039.
- Worden, R. (1995). The causes of police brutality: Theory and evidence on police use of force. pp-23. New York, NY: Routledge.
- Worden, R. E., Kim, M., Harris, C.J. Pratte, M.A., Dorn, S.E. & Hyland, S. (2013). Intervention with problem officers. An outcome evaluation of an EIS intervention. *Criminal Justice and Behaviors*. 40(4), 409-437, http://doi.org/10.1177/0093854812458095.
- Worden, Robert E., McLean, Sarah, J. (2017) Research on police legitimacy: the state of the art. *Policing*. Bradford Vol. 40, Is 3, 480-513.

Wu, X. Ma., R. & Zhang, W. (2006). Innovating to create value for mass customers in developing countries: New dimensions of secondary innovation. *In 2006 Technology Management for the Global Future -PICMET 2006 Conference*. Vol. 2, pp. 941-950, https://doi-

org.ezp.waldenulibrary.org/10.1109/PICMET.2006.296626.

- Young, J., Taylor, I., & Walton, P. (2013). The new criminology: For a social theory of deviance. New York, NY: Routledge.
- Zansberg, S.D. & Campos, P. (2004). Sunshine on their blue line: Public access to police internal affairs files. *Commercial Law.* 22, 34.

Appendix A: Title of Appendix Use of Force Complaints

Violating Rights

Act or omission contrary to objectives of the department

Detention/arrest in violation of constitutional rights

Ethnicity

Failure to conform to the department's rules, reg. order, policies & while on duty

Failure to make a report when approached by a citizen

Failure to notify a supervisor of a UOF

Failure to perform duties which maintain satisfactory standards of efficiency objectives of Dept.

Failure to provide name or badge number

Failure to request a supervisor to investigate a use of force incident

Failure to request a supervisor when a citizen desires to make a complaint

Failure to take proper law enforcement action

Illegal warrantless search

Improper search of a member of the opposite sex

Improper towing of a vehicle

Improper towing of vehicle

Improper warranties search

Members shall obey all federal state and/or local laws

Misuse of discretion

No PC/suspicion for arrest/detention

Officers shall not mistreat persons who are in their custody

Race

Taking official action in a personal dispute or incident involving a friend/ relative while off duty

Theft

Unauthorized dissemination of official business, records or data of the Dept. Unreasonable handcuffing/detention Unreasonable search/seizure of cell phone Unwarranted holding of property Violation of law enforcement code of ethics

Aggressive Behavior and Language

Indecent or lewd language Intimidation/improper display of police authority Mistreatment of person in custody Rude, demeaning or affronting gestures Rude, demeaning or affronting language Rude, demeaning or insulting gestures Rude, demeaning or insulting language

Excessive Physical Force

Aggressive or unsafe driving Failure to properly handcuff prisoner Improper use of weapon Members shall not use more force than reasonably necessary Unreasonable force (firearm) Unreasonable force (handcuff marks) Unreasonable force (hands, fist, feet) Unreasonable force (less lethal weapon)